XR-U800

SERVICE MANUAL

US Model
Canadian Model

- Refer to another service manual XM-X32/X33 for XR-U800 supplied remote commander.

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-55PA-31

SPECIFICATIONS

Cassette player section

Tape track 4-track 2-channel stereo
Wow and flutter 0.06 % (WRMS)
Frequency response 30 – 22,000 Hz
Signal-to-noise ratio

Cassette type	Dolby B NR	Dolby C NR	Dolby NR off
TYPE II, IV	67 dB	73 dB	61 dB
TYPE I	64 dB	70 dB	58 dB

Tuner section

FM

Tuning range 87.5 – 107.9 MHz
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz
Sensitivity 8 dBf
Selectivity 75 dB at 400 kHz
Signal-to-noise ratio 65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz 0.5% (stereo), 0.3% (mono)
Separation 35 dB
Frequency response 30 – 15,000 Hz

AM

Tuning range 530 – 1,710 kHz
Antenna terminal External antenna connector
Intermediate frequency 10.71 MHz/450 kHz
Sensitivity 30 µV

General

Tone controls Bass ±8 dB at 100 Hz
Treble ±8 dB at 10 kHz
Power requirements 12 V DC car battery (negative ground)
Dimensions Approx. 186 × 57 × 163 mm (7 3/8 × 2 1/4 × 6 1/2 in.) (w/h/d) not incl. projecting parts and controls
Mounting dimension Approx. 182 × 53 × 146 mm (7 1/4 × 2 1/8 × 5 3/4 in.) (w/h/d) not incl. projecting parts and controls
Mass Approx. 1.1 kg (2 lb. 7 oz.)
Supplied accessories Rotary commander (RM-X33) (1)
Mounting hardware (1 set)
Power connecting cord (1)
Front panel case (1)
Optional accessories Wireless remote commander RM-X36
UNILINK cable (supplied with an RCA pin cord)
RC-61 (1 m), RC-62 (2 m)
RCA pin cord RC-63 (1 m), RC-64 (2 m), RC-65 (5 m)
Optional equipment CD changer CDX-U606, CDX-U404, CDX-U303, etc.
TV tuner unit XT-U400V
Source selector XA-U20, XA-U40
Digital signal processor XDP-U50D

Design and specifications subject to change without notice.

使用時は添付資料も参照のこと
Refer to the additional documents

FM/AM CASSETTE CAR STEREO

SONY®

Features

General

- Supplied with **the rotary commander** which can be operated like a wiper or headlight switch of your car while driving.
- **Detachable-front panel** enables you to take the front panel away with you when you leave your car. (page 15)
- **Caution alarm** will be activated if you turn off the ignition key without removing the front panel from the unit.
- Switchable **two color illumination (amber and green).** (page 9)
- Provided with a **digital 12-hour clock.** (page 16)
- Line outputs for connecting an optional power amplifier.
- **Telephone-mute function** for decreasing the volume automatically with a telephone call.

Tuner section

- Up to 30 stations can be preset: 20 stations on FM and 10 stations on AM.
- **BTM (Best Tuning Memory) function** automatically searches and stores the stations with the strongest signals on the preset number buttons in order of frequency. (page 29)
- **Station memo function** for displaying the names of the radio stations stored in the memory. (page 32)
- Provided with a **FM diversity reception system** for a better radio reception.

Cassette player section

- **Laser amorphous head** for clear sound reproduction.
- **Dolby B and C NR*** system reduces hiss noise during tape playback. (page 7)
- **Intro scan function** for playing the first 10 seconds of each track. (page 17)
- **Repeat play function** for playing back a currently playing track repeatedly. (page 17)
- **Blank skip function** for automatically skipping blank spaces during tape playback. (page 7)
- **ATA (Automatic Tuner Activation)** for automatically turning on the tuner while fast-forwarding or rewinding a tape. (page 7)

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

CD changer control section (when the optional Sony CD changers are connected)

- **Several Sony CD changers (not supplied) can be connected and controlled** by the use of the Sony source selector(s) (not supplied).
- **Custom file function** for displaying the title of each disc and setting the PLAY/SKIP mode on each track. (page 22)
- **Shuffle play function** for playing tracks in random order. (page 19)
- **Intro scan function** for playing the first 10 seconds of each track. (page 21)
- **Repeat play function** for playing a currently playing track repeatedly. (page 20)

TV tuner section (when the optional TV monitor and TV tuner unit are connected)

- **Station memo function** for displaying the names of TV stations on the TV monitor. (page 32)
- **List up function** enables CD titles and the contents of the preset memory to be displayed on the TV monitor. (page 27,34)

DSP control section (when the optional Digital Signal Processor XDP-U50D is connected)

- **Surround menu** enables you to select different soundfields inside your car.
- **DSP custom file function** enables the discs to be played in the customized DSP modes. (page 40)
- **LSM function** enables the programs to be played with the preset surround menu. (page 42)

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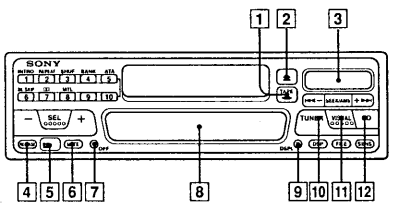
SECTION 1
GENERAL

This section is extracted from instruction manual.

Location and Function of Controls

Main unit



Refer to the pages in ● for details.

1 **TAPE/◄II► (playback/transport direction change) button** ⑰

2 **≜ (eject) button**

3 **Sub (current mode) display window**
Displays the currently selected program source (tape/CD/FM/AM/TV) and the DSP mode.

4 **RELEASE (front panel release) button** ⑮

5 **Receptor for the remote commander**

6 **MUTE button**
Press to mute the sound momentarily. Press again to restore the same volume level. This button is also canceled in the following cases:
— when the + side of the −/+ button or the OFF button is pressed.
— when ejecting a cassette by pressing the ≜ button during tape playback.
— when the ignition key of your car has been turned to the OFF position for more than eight seconds.

7 **OFF button**
Press to turn off the unit.

8 **Main (Current operation) display window**
Displays the information of the currently selected program source such as the tape transport direction, the elapsed playing time of a disc and the current time etc.

9 **DSPL (display mode change/time set) button**
Each time the button is pressed, the display on the main display window changes as follows:

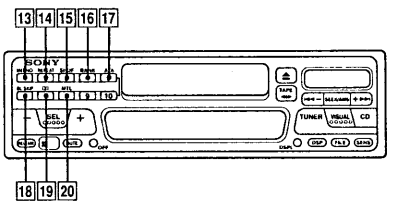
	"PLAY" → "PLAY" (The indication will be scrolled.) → Clock (Clock → Frequency)*1
	Elapsed playback time → Disc title*2 → Clock
(Radio)	Station name*2 → Frequency → Clock
(TV)	Channel number → TV station name → Clock

*1 While the ATA function is activated.
*2 If the title has not being registered, "- - - - - - - -" indication will appear on the main display window.

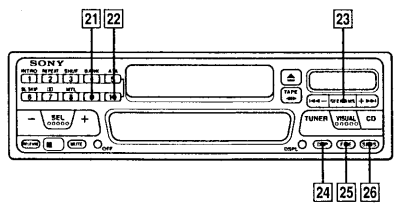
10 **TUNER (radio on/band select) button**
Each time the button is pressed, the band changes in order of:
FM1 → FM2 → AM → FM1.

11 **VISUAL (television/video select) button***1
Each time the button is pressed, the mode changes in order of:
TV (television picture) → VIDEO 1 (video picture) → VIDEO 2*2 → TV.
*1 Only when the optional TV tuner unit is connected.
*2 Only when the rear TV monitor is connected and the "VIDEO 2" mode is selected.

12 **CD (disc play/CD changer select) button** ⑮



13 **INTRO button** (1)	**Intro scan** ⑰㉑		
14 **REPEAT button** (2)	**Repeat play** ⑰⑳		
15 **SHUF button** (3)	—	**Shuffle play** ⑱	
16 **BANK button** (4)	—	**Bank play** ㉘	
17 **ATA button** (5)	**Automatic Tuner Activation** Press to make the tuner turn on automatically every time you fast-wind a tape. To cancel, press it once more.	—	
18 **BL.SKIP button** (6)	Press to skip a blank space (longer than eight seconds) automatically during tape playback. To cancel, press it once more.	—	**Preset number buttons** ㉒㉛
19 **DD (Dolby NR) button** (7)	Press when listening to a tape recorded in the Dolby B-NR or Dolby C-NR system. Each time you press the button, the mode changes as follows. Dolby B-NR → Dolby C-NR → Cancel	—	
20 **MTL (metal/CrO2) button** (9)	Press when listening to a CrO_2 (TYPE II) or metal (TYPE IV) tape. To cancel, press it once more.	—	



21 (9)	—	—	**Preset number buttons** ㉚㉛
22 (10)	—	—	
23 **SEEK/AMS button** (⏮ SEEK/AMS ⏭)	**AMS (Automatic Music Sensor) function** ⏮: Press once to locate the beginning of the currently playing track. ⏭: Press once to locate the beginning of the next track. Press repeatedly to locate previous or succeeding tracks.		**Automatic tuning** ㉘ (Press lightly.)
	Manual search Keep either side of the button pressed until the desired part of a track is located.		**Manual tuning** ㉘ (Press and hold.)
	⏮: To fast-forward ⏭: To rewind	⏮: To fast-forward ⏭: To fast-reverse	

The buttons 13 – 22 function as the direct disc selection buttons as well during CD play.
Press the button whose number corresponds with the desired disc number for more than one second.

24 **DSP* (DSP mode on • off/select) button**
When pressed lightly, this button functions as the DSP mode on/off button. When pressed for more than one second, the unit enters the DSP select/adjust mode. Each time the button is pressed, the DSP select/adjust mode and the display on the sub display window changes as follows:

Sub display window	DSP select/adjust mode
SUR	Surround menu select/ Effect level adjust
LP	Listening position adjustment
SUB	Subwoofer tone/volume adjustment
BAS	Bass adjustment
TRE	Treble adjustment

* Digital Signal Processor

25 **FILE (custom file mode select • set/list up) button**
Each time the button is pressed, the mode changes as follows:
——►: Press the button for more than two seconds.
- - -►: Press the button lightly.

Normal CD play/radio•TV reception
→ Name edit mode
→ PLAY/SKIP edit mode*1
→ DSP custom file mode*2
→ Cancel (Normal CD play/radio•TV reception)

*1 The unit enters this mode only when the CD custom file function is activated.
*2 The unit enters this mode only when the DSP custom file function is activated.

If the button is pressed only lightly while the optional TV tuner and monitor are connected, the information of the disc and radio/TV will be displayed on the TV monitor.

26 **SENS (sensitivity adjust/best tuning memory function) button** ㉘㉙

Changing the illumination color

Press the (1 INTRO) button while pressing the (DISPL) button. You can choose the color between amber and green.

When listening at low volume with enhanced bass and treble (loudness function)

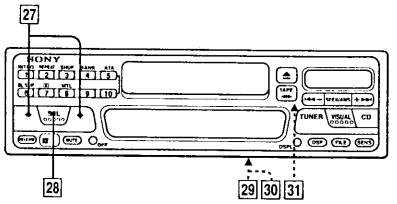
Press the (2 REPEAT) button while pressing the (SEL) button. To cancel the mode, press these buttons once more.

Muting the beep tone

Press the (6 BL.SKIP) button while pressing the (SEL) button. To obtain the beep tone again, press these buttons once more.

Changing the line output level (When the optional digital signal processor XDP-U50D and a graphic equalizer are connected)

Press the (8 MTL) button while pressing the (SEL) button.
To cancel the mode, press these buttons once more.



[27] **(sub output level/bass/treble/balance/fader/volume control) button**
Press to adjust each mode.

[28] **SEL (control mode select) button**
Press to select the desired control mode: SUB (sub), BAS (bass), TRE (treble), BAL (balance), FAD (fader) or VOL (volume).

Sub display window	Control mode	Press – side	Press + side
SUB	SUB output level control	For less volume	For more volume
BAS	Bass control*1	For less bass	For more bass
TRE	Treble control*1	For less treble	For more treble
BAL	Balance control*3	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FAD	Fader control*1,2	To decrease the rear-speakers' volume	To decrease the front-speakers' volume
VOL	Volume control	For less volume	For more volume

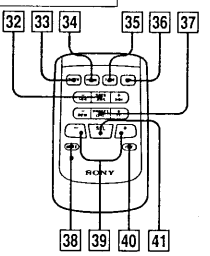
*1 The level of the SUB output cannot be adjusted.
*2 • When the optional digital signal processor XDP-U50D is connected, you can adjust the fader whether the DSP mode is on or off.
• When you use the stereo graphic equalizer (not supplied), set the fader control to the center position and adjust the level with the equalizer.
*3 The level of the SUB output can be adjusted as well.

[29] **POWER SELECT switch (located on the bottom of the unit)**
See "POWER SELECT Switch" in the installation/connections manual.

[30] **FM DIVERSITY switch (located on the bottom of the unit)**
See "FM DIVERSITY Switch" in the installation/connections manual.

[31] **Reset button (located on the front side of the unit hidden by the front panel)**
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

Optional Wireless Remote Commander



Buttons of the same function as those on the main unit

[32]	**AMS (Automatic Music Sensor) button***	**SEEK (automatic tuning) button***

* You cannot do the manual search and manual tuning with the remote commander.

[33] **TUNER (radio on/band select) button**

[34] **VISUAL (television/video select) button**

[35] **TAPE (playback/transport direction change) button**

[36] **CD (disc play/CD changer select) button**

[38] **MUTE button**

[39] **(sub output level/bass/treble/balance/fader/volume control) buttons**

[40] **OFF button**

[41] **SEL (control mode select) button**

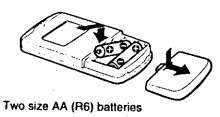
Different function buttons

[37]	**FF/REW (fast-forward/rewind) button**	**DISC (disc change) button** +: To select the next disc number –: To select the previous disc number	**PRESET (preset search) button**

When the POWER SELECT switch is set to the OFF position, the unit cannot be operated with the wireless remote commander unless one of the CD, TUNER and VISUAL buttons on the unit is pressed or a cassette is inserted to activate the unit first.

Optional Wireless Remote Commander

Installing the Batteries



Two size AA (R6) batteries

Battery life
When the batteries become weak, you will not be able to operate the unit with the remote commander. Battery life is approx. six months although it depends on the way of use.

Notes on batteries
To avoid damage from battery leakage and corrosion:
— insert the batteries with correct polarity
— do not use an old battery with a new one, or different types of batteries together
— remove the batteries when you do not use the unit for a long period of time
— do not charge the batteries.
If any battery leakage occurs, replace the batteries with new ones after cleaning the battery compartment.

Notes on the Remote Commander

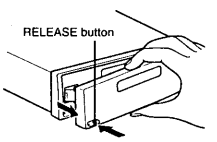
- Do not leave the remote commander in a location near any heat sources, or in a place subject to direct sunlight (especially on the dashboard in summer, etc.).
- When you park the car in direct sunlight, place the remote commander in a location not subject to direct sunlight such as the glove-box.

Detaching and Attaching the Front Panel

The front panel of this unit can be detached in order to prevent the unit from being stolen.

Detaching the Front Panel

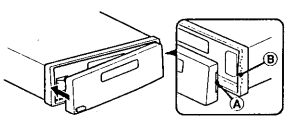
Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel and detach the panel by pulling it towards you as illustrated.



Be sure not to drop the panel when detaching it from the unit.

Attaching the Front Panel

Apply the right hand side of the front panel to the unit by attaching part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push until it clicks.

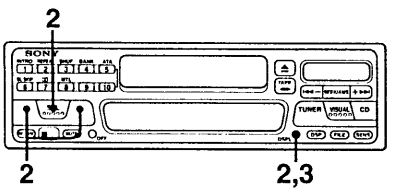


Caution alarm

If you turn the ignition key to the OFF position without removing the front panel, the caution alarm will be activated and a beep tone will be heard for a few seconds (only when the POWER SELECT switch is set to the ON position).

Notes
- Make sure that the front panel is the right way up when attaching it to the unit as it cannot be attached upside down.
- Do not press the front panel hard against the unit when attaching it to the unit. It can easily be attached by pressing it lightly against the unit.
- When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or give excessive pressure to the display window of the front panel.
- Before removing the front panel, be sure to turn the power off. However, if you press the RELEASE button to detach the panel while the unit is still turned on, the power will be automatically turned off in order to protect the speakers from being damaged.
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dashboard etc. of a car parked in direct sunlight where there may be a considerable rise in temperature inside the car.

Setting the Clock



The clock has a 12-hour digital indication.

For example, to set it to 10:08.

1 **Turn the ignition key to the ON position.**

2 **Press the DSPL button for more than two seconds.**

DSPL ○ ➡ 0:00

While keeping the DSPL button pressed, proceed with the following;

Press either side of the ⏮ ⏭ button to set the hour digits. (to go back) (to go forward)

10:00

Press the SEL button.

Press either side of the ⏮ ⏭ button to set the minute digits. (to go back) (to go forward)

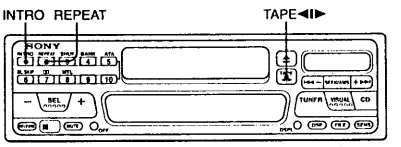
10:08

3 **The clock starts activating when you take your finger off the DSPL button.**

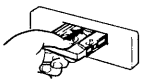
10:08

Note
If the POWER SELECT switch on the bottom of the unit is set to the OFF position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio, or start CD play or tape playback.

Listening to Tape Playback



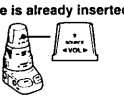
Insert a cassette to start playback.



➡ TAPE

If a cassette is already inserted

TAPE ◀II▶ or



You can use the optional wireless remote commander as well.

Tape transport direction indication
Press the DSPL button during tape playback.

▶ PLAY

The "PLAY" indication will be scrolled across the main display window from left to right while the top side of the cassette is being played back.

◀ PLAY

The "PLAY" indication will be scrolled across the main display window from right to left while the reverse side of the cassette is being played back.

Note
The intro scan function will be canceled if you turn off the unit by pressing the OFF button or turning the ignition key to the OFF position and leaving it for more than eight seconds.

Playing in Other Modes

Listening to the first 10 seconds of each track — Intro scan function

Press the INTRO 1 button during playback.

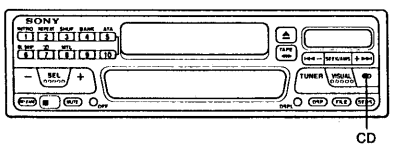
The first 10 seconds of all the tracks are played. When you find the desired track, press the button once more. The unit returns to the normal playback mode.

Listening to the currently playing track repeatedly — Repeat play function

Press the REPEAT 2 button during playback.

When the currently playing track is over, the same track is played again from the beginning. To cancel this mode, press the button once more.

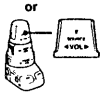
Listening to CD Play
(With the Optional CD Changer(s) Connected)



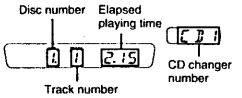
Press the CD button.

CD

or



➡

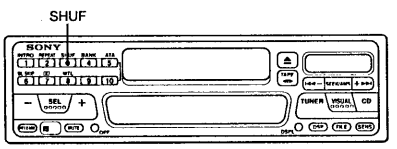


CD play starts.

You can use the optional wireless remote commander as well.

If the unit is set in the normal playing mode, after the end of a disc, the disc with the next number shown will be automatically played. If two or more CD changers are connected, after the end of the last disc, the first disc in the CD changer with the next number shown will be played. The order of the CD play can be rearranged by changing the playing modes. For details, see "Playing in Other Modes" (page 19).

Playing in Other Modes



Playing the Discs Randomly
— Shuffle Play Functions

Playing the tracks on the currently selected disc randomly — Disc shuffle play

Press the SHUF 3 button lightly to get the "SHUF 1" indication during CD play.

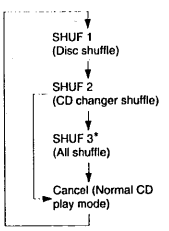
Playing every track on every disc in the currently selected CD changer randomly — CD changer shuffle play

Press the SHUF 3 button lightly to get the "SHUF 2" indication during CD play.

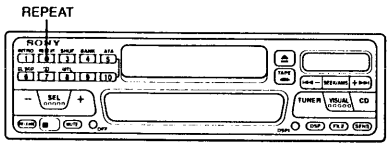
Playing every track on every disc in all the CD changer(s) connected randomly — All shuffle play (when two or more CD changers are connected)

Press the SHUF 3 button lightly to get the "SHUF 3" indication during CD play.

The function of the SHUF button changes cyclically as follows:



* All-shuffle play (SHUF 3) mode functions only when two or more changers are connected to the unit. When only one changer is connected, the "SHUF 3" indication will not be displayed.
In this case, if you press the SHUF button again while the "SHUF 2" indication is being displayed, the shuffle play will be canceled.



Playing a Disc Repeatedly
— Repeat Play Functions

Playing the currently selected track repeatedly — Track repeat

Press the REPEAT 2 button lightly to get the "REP 1" indication during CD play.

Playing the currently selected disc repeatedly — Disc repeat

Press the REPEAT 2 button lightly to get the "REP 2" indication during CD play.

When the last track on the currently selected disc is over, the CD play is repeated from the beginning of that disc.

Playing the discs in the currently selected CD changer repeatedly — CD changer repeat (when two or more CD changers are connected)

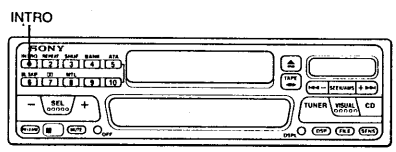
Press the REPEAT 2 button lightly to get the "REP 3" indication during CD play.

When the last disc in the CD changer has been played, the CD play will be repeated from the first disc in the currently selected CD changer.

The function of the REPEAT button changes cyclically as follows:

REP 1 (Track repeat)
↓
REP 2 (Disc repeat)
↓
REP 3* (CD changer repeat)
↓
Cancel (Normal CD play mode)

* CD changer repeat (REP 3) mode functions only when two or more CD changers are connected to the unit. When only one CD changer is connected, the "REP 3" indication will not be displayed. In this case, if you press the REPEAT button again while the "REP 2" indication is being displayed, the repeat mode will be canceled.



Listening to the first 10 seconds of each track — Intro Scan Function

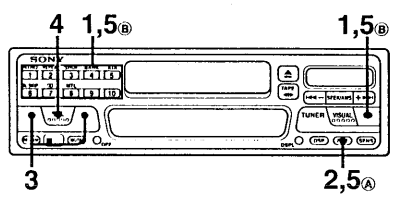
Press the INTRO 1 button lightly during CD play.

The first 10 seconds of all the tracks on the currently selected disc are played in order. After the first disc is played with the intro scan function, the next disc is played. When two or more CD changers are connected, after the last disc is played, CD play moves on to the next CD changer.

When you find the desired track, press the INTRO button once more.
The unit returns to the normal CD play mode.

If the INTRO button is pressed during shuffle play, the first 10 seconds of every track will be played randomly.

Displaying the Title of Each Disc
— Disc Memo Function



You can put a title of your own choice onto a disc (one title per disc). The title can be displayed on the display window while the disc is being located and played.

Putting Your Personalized Titles onto the Discs

1 Play the disc that you wish to title.

CD → INTRO 1 — 10 → (Press for more than one second.)

2 Press the FILE button for more than two seconds to enter the name edit mode.

FILE → Name edit mode

3 Press either side of the − / + button to select the desired characters.

Each time you press either side of the − / + button, characters appear in the following order:

→ _ → A → B → C → ... → X → Y → Z → 0 → 1 → 2 → 3 → ...

→ _ → \ → (→) → \ → / → * → − → + → 9 → ...

You can use the supplied rotary commander or the optional wireless remote commander as well.

4 Press the SEL button after locating the desired character.

SEL → 5

The flashing part moves to the next space on the right. Repeat steps 3 and 4 to enter the entire titles. Up to eight characters can be used per disc.

5 Ⓐ To return to the normal CD play mode

FILE

Press the FILE button for more than two seconds.

Ⓑ To continue to put titles onto the discs

CD or INTRO 1 — 10 (Press for more than one second.)

Notes
- If you press the SEL button when the eighth character (farthest right character) is flashing, the flashing part goes back to the first character (farthest left character).
- If you wish to put a blank space after a character, select "_" (under-bar).

If you press the CD button, the next CD changer will be selected. (when two or more CD changers are connected)

Changing a title

Play the disc whose title you wish to change and repeat steps 2 to 5.

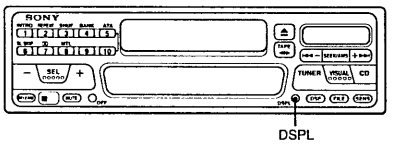
When you change the title, the PLAY/SKIP settings of the bank function or any setting of DSP custom file function will not be erased at the same time.

Erasing a title

1 **Select the CD changer and play any disc.**
2 **Press the FILE button for more than two seconds to enter the name edit mode.**
3 **Press the SEL button while pressing the preset number button 5.**
4 **Press either side of the − / + button to select the title that you wish to erase.**
5 **Press the SEL button for more than two seconds.**
Repeat step 4 and step 5 if necessary.
6 **Press the FILE button for more than two seconds.**
Now the title and the PLAY/SKIP settings are erased.
The unit returns to the normal CD play mode.

If you erase the title, the PLAY/SKIP settings of the bank function and the settings of DSP custom file function will be erased as well.

The alternative method to erase a title
You can erase a title by selecting eight "_"s (under-bars) as described in step 3 of "Putting Your Personalized Titles onto the Discs"(page 22).



Displaying the Title

Press the DSPL button.

DSPL ○ ➡ SCHUBERT

Title display modes

While loading the discs, whatever the display mode the unit is in, the indication on the main display window automatically changes as follows:

► The title of the disc (two seconds) ► Disc and track number (two seconds) ► Currently selected display mode (two seconds)

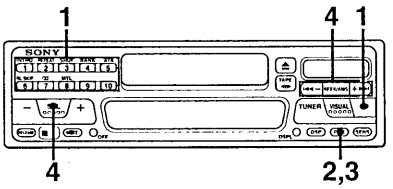
Custom file function

You can register the customized titles and the PLAY/SKIP settings on up to 110 discs* per CD changer (custom file function). These settings are stored in the memory of the CD changer. Therefore, even if you take a custom-filed disc out of the CD changer, you can still use the same custom file function the next time you play that disc in the same CD changer. Furthermore, if your system has several CD changers connected, you can play that disc in another CD changer and still use the same custom file function, provided that the CD changers are inter-connected with the UNILINK cables.

* If you try to register more than 110 discs, the unit will display the "FULL" indication and will not accept the command for custom-filing. In this case, you will have to erase the memory of other discs before you enter the new ones (page 23).

Note
The registered titles of the discs may not appear on the main display window immediately while it is being loaded inside the CD changer.

Playing Selected Tracks on a Disc
— Bank Function



Setting the Play and Skip Modes on the Discs

1 **Play the disc to which you wish to set these modes.**

CD → INTRO (1) — (10) ➡ CD 1

(Press for more than one second.)

2 **Press the FILE button for more than two seconds and put the titles onto the discs.**

(FILE)

See page 22 for details about putting on a title. If the title has already been registered, go to step 3.

3 **Press the FILE button lightly to enter the PLAY/SKIP edit mode.**

(FILE) ➡ 5. 1 PLAY

PLAY/SKIP edit mode

4 **Press either side of the AMS button to select the track number you wish to skip and press the SEL button.**

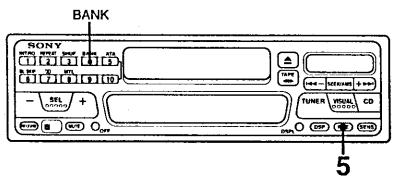
(◄◄ – SEEK/AMS + ►►) → SEL ➡ 5. 3 SKIP

The indication changes from "PLAY" to "SKIP". If you wish to return to "PLAY", press the SEL button once more.

Repeat the operation in this step to set either the "PLAY" or "SKIP" mode on all the tracks.

You can use the supplied rotary commander or the optional wireless remote commander as well.

Notes
- When the title is not registered, you cannot enter the PLAY/SKIP edit mode even if you press the FILE button.
- You can only set the "SKIP" mode onto up to 24 tracks. If a disc has more than 24 tracks, you will not be able to set the "SKIP" mode on the tracks after the 24th track.
- You cannot set the "SKIP" mode onto all of the tracks on a disc.



5 **Press the FILE button for more than two seconds.**

(FILE)

The unit returns to the normal CD play mode.

Playing with the Bank Function

Press the BANK button lightly during CD play.

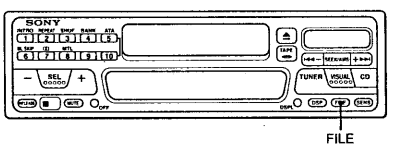
BANK (4) ➡ BANK- ON

The "BANK" indication appears on the main display window. The unit starts playing the tracks with "PLAY" settings which have been set by the PLAY/SKIP edit mode.
To return to the normal CD play mode, press the BANK button once more.

When the BANK button is pressed while pressing the SEL button, the unit starts playing the tracks with "SKIP" settings which have been set by the PLAY/SKIP edit mode.
To go back to the normal playing mode, press the BANK button again while pressing the SEL button.

Even when you play a disc with the PLAY/SKIP settings, if the "BANK" indication has not appeared on the main display window, the disc will not be played according to the settings.

Displaying the Stored CD's Information on the TV Monitor *(When the Optional TV Tuner Unit and TV Monitor are Connected)*

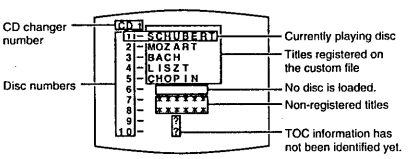


The titles of the discs inside and other information stored in the currently selected CD changer will be listed on the TV monitor.

Press the FILE button lightly during CD play.

(FILE)

Example: When the CD changer 1 is selected



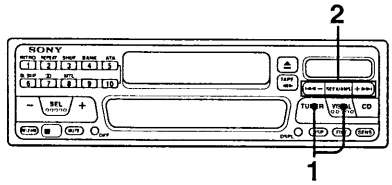
- A blank space will be displayed if there is a disc number representing an empty slot in the disc magazine.
- If a title is registered on the custom file, that name will be displayed. If not, "******" will be displayed in its place.
- "?" will be displayed if the TOC information of the disc has not been collated with the custom file.
- The name of the currently playing disc will be displayed in magenta.

Turning off the display

Press the FILE button once more.

Notes
- It may take some time before all the displays come onto the screen.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode (page 51).

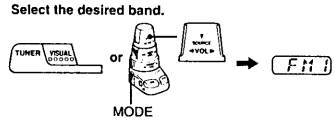
Tuning in a Station



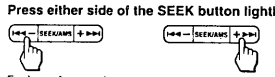
TV reception can be made only when the optional TV tuner unit is connected to the optional TV monitor.

Searching for the Stations Automatically
— Automatic Tuning

1 **Select the desired band.**



2 **Press either side of the SEEK button lightly.**



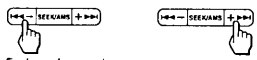
For lower frequencies (lower frequency channels)

For higher frequencies (higher frequency channels)

The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

Tuning in by Adjusting the Frequency (Channel) — *Manual Tuning*

Select the desired band, then press and hold either side of the SEEK button.



For lower frequencies (lower frequency channels)

For higher frequencies (higher frequency channels)

Release the button when the desired station is received.

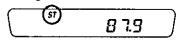
PREVENTING ACCIDENTS!

While you are driving, the use of the Automatic Tuning and the Memory Preset Tuning is recommended in favor of the Manual Tuning.

You can use the optional wireless remote commander as well.

Note
Make sure that you press either side of the SEEK button lightly. If you keep it pressed, the button will function as the manual tuning button.

When an FM stereo program with a sufficient signal strength is tuned in

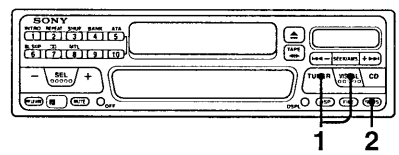


The "ST" indication will appear.

Avoiding the automatic tuning from stopping on stations too frequently (Local Seek Mode)
Press the SENS button lightly to get the "LCL" indication. Only the stations with relatively strong signals can be tuned in. The local seek mode functions only when the Automatic Tuning is in operation.

If FM stereo broadcasting is difficult to receive (Monaural Mode)
Press the SENS button lightly to get the "MONO" indication. The sound will improve, but it will become monaural.

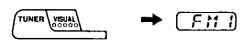
Memorizing the Stations Automatically



The best receiving stations are automatically searched and memorized on each band (FM1, FM2, AM and TV). Up to 10 stations on each band can be stored on the preset number buttons 1 to 10 in order of frequency.

Memorizing the Stations Automatically
— BTM (Best Tuning Memory) Function

1 **Select the desired band.**



2 **Press the SENS button for more than two seconds.**

The BTM function

During radio reception, the BTM function searches all the receivable stations within the currently selected band and memorizes the ones in good receiving conditions in sequence from the lowest frequency.

How to memorize the stations on the preset number buttons
— When there is no preset number indicated on the main display window, all the preset number buttons set in the currently selected band will be filled with the memories.
— When there is a preset number indicated on the main display window, the unit will memorize the stations on the preset number buttons from the one currently being displayed. For example, when you choose FM2 and preset number 3 is being displayed, the operation will start from preset number 3 on FM2, and will stop at preset number 10 on FM2.

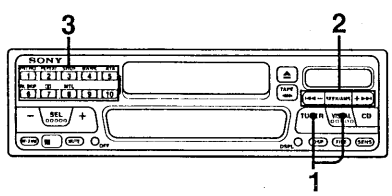
You can use the supplied rotary commander or the optional wireless remote commander as well.

The receivable frequency ranges of the FM bands (FM1, FM2) are the same
Therefore, 20 stations can be memorized on FM.

Note
There may be cases where there are not enough receivable stations due to the lack of stations in the vicinity or weak broadcasting signals. In such cases, the BTM operation may stop without all the buttons being occupied with memories.

Note
During TV reception, the unit memorizes up to ten receivable stations in order of the channel numbers.

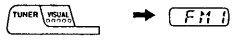
Memorizing Only the Desired Stations



Up to 10 stations on each band (FM1, FM2, AM and TV) can be stored on the preset number buttons in order of your choice.

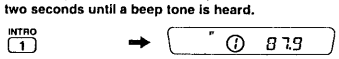
For example, to store a station on preset number button 1.

1 **Select the desired band.**



2 **Tune in the station which you wish to store on the preset number button.**

3 **Keep the preset number button pressed for about two seconds until a beep tone is heard.**



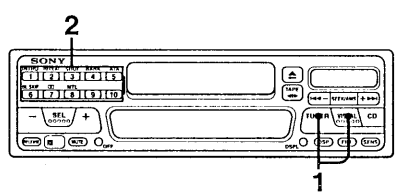
The number of the pressed preset number button now appears on the main display window.

Repeat the same procedure to store other stations.

You can use the supplied rotary commander or the optional wireless remote commander as well.

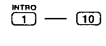
Each preset number button has only one memory location per band
If you try to store another station on the same preset number button, the previously stored station will be erased.

Receiving the Memorized Stations



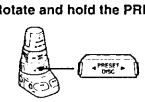
1 **Select the desired band.**

2 **Press the desired preset number button lightly.**



Receiving in Order the Stations Stored in the Memory — *Preset Search Function*

Rotate and hold the PRESET control on the rotary commander.



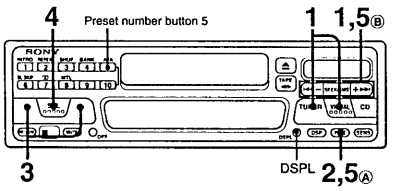
You can search the memorized stations on the preset number buttons in order.
Release the PRESET control when the desired station is located.

You can use the supplied rotary commander or the optional wireless remote commander as well.

Notes
- There may be cases where even the stations which are stored in the memory cannot be received due to weak signals in the vicinity of your car.
- If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized once more. To receive the previously memorized station, make sure that the preset number button is pressed only lightly.

You can use the PRESET button on the optional wireless remote commander as well.

Displaying the Name of Each Station
— Station Memo Function



You can store the names of radio/TV stations in the memory of the tuner. The name of the station can be displayed on the display window while it is being tuned in. You can store the names of the TV stations in the same way. The steps described below can be applied to the TV operation as well.

Storing the Station Names in the Memory of the Tuner

1 **Tune in a station whose name you wish to register.**

TUNER VISUAL SEEK/AMS → FM1

2 **Press the FILE button for more than two seconds to enter the name edit mode.**

FILE →

Name edit mode

3 **Press either side of the − / + button to select the desired characters.**

Each time you press either side of the − / + button, characters appear in the following order:

→ _ → A → B → C → ... → X → Y → Z → 0 → 1 → 2 → 3 → ...

→ _ → , → (→) → \ → / → ‡ → - → + → 9 → ...

You can use the supplied rotary commander or the optional wireless remote commander as well.

4 **Press the SEL button after locating the desired character.**

SEL → W1

The flashing part moves to the next space on the right. Repeat steps 3 and 4 to enter the entire name. Up to eight characters can be used per name.

5 **Ⓐ To return to the normal radio/TV reception mode**

FILE

Press the FILE button for more than two seconds.

Ⓑ To continue to put names onto the stations

SEEK/AMS

Tune in another station and repeat the procedure.

Notes
- If you press the SEL button when the eighth character (farthest right character) is flashing, the flashing part will move back to the first character (farthest left character).
- If you wish to put a blank space after a character, select the "_" (under-bar).

Note
You can store up to 40* names, but if you try to enter more, the "FULL" indication will appear on the main display window and you will not be able to register them. You can register more names after erasing some of the existing names.

* If the optional TV tuner unit is connected, you can store the names of all the receivable TV stations as well.

Changing a name

Tune in the station whose name you wish to change and repeat steps 2 to 5.

Erasing a name

1 Tune in any station.
2 Press the FILE button for more than two seconds to enter the name edit mode.
3 Press the SEL button while pressing preset number button 5.
4 Press either side of the − / + button to search for the names you wish to erase.
5 Press the SEL button for more than two seconds.
Repeat steps 4 and 5 if necessary.
6 Press the FILE button for more than two seconds.
The unit returns to the normal radio/TV reception mode.

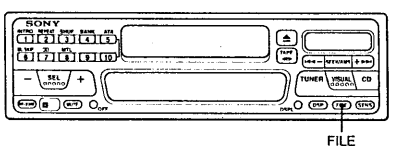
The alternative method to erase a name
You can erase a name by selecting eight " _"s (under-bars) as described in step 3 of "Storing the Station Names in the Memory of the Tuner" (page 32).

Displaying the Name

Press the DSPL button.

DSPL → WRKI55

Displaying the Contents of the Preset Memory on the TV Monitor *(When the Optional TV Tuner Unit and TV Monitor are Connected)*

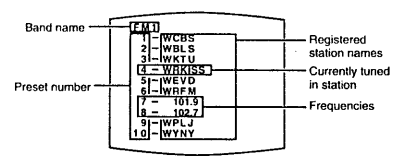


The contents of the preset memory stored on the currently received band is listed on the TV monitor.

Press the FILE button lightly during radio/TV reception.

FILE

Example: When receiving the FM1 band



- If the name of a station is registered, that name will be displayed. If the name of a station is not registered, the frequency of that station will be displayed.
- The name of the currently tuned in station will be displayed in magenta.

Turning off the display

During radio reception, press the FILE button once more. During TV reception, the list display on the TV monitor will automatically turn off after a few seconds.

Notes
- It may take some time before all the displays appear on the screen.
- The information cannot be listed when the unit is in the simultaneous play mode (page 51).

Overview of the DSP Function

If the optional DSP (Digital Signal Processor)is connected, you can add some effects to the soundfield of the currently listening program source.

What is a Digital Signal Processor (DSP)?

The DSP can digitalize and process the audio signal with high speed thus enabling you to adjust the acoustic characteristics of the source sound without losing the sound quality. With the DSP unit you can control and adjust the direct, reflected and reverberated sound of the audio output according to your preference.

The DSP modes

- Surround menu select/effect level control mode
- DSP custom file register mode
- LP (listening position) adjust mode
- Sub woofer cutoff frequency select/volume control mode
- Bass adjust mode
- Treble adjust mode

Surround menu

There are ten preset surround modes available with this unit. You can select your desired surround mode to suit the source audio. These modes can simulate different soundfields so that you can enjoy the sensation of being close to the music source or being at a live concert etc.

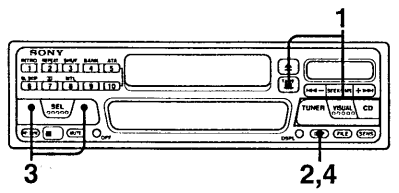
HALL	Concert hall
JAZZ	Jazz club
DISCO	Disco with thick walls
THEATER	Theater/cinema
PARK	Big open space
LIVE	Live concert
OPERA	Opera house
CHURCH	Church/chapel with a lot of reverberation
STADIUM	Open-air concert in a stadium
CELLAR	Cellar with a lot of reverberation
DEFEAT	Normal mode without any DSP effects*

Notes
- When the optional digital signal processor XDP-U50D and a graphic equalizer are connected, there may be cases where the reproduced sound becomes distorted when the output audio signal of the graphic equalizer is boosted too much. In this case, press the preset number button 8 while pressing the SEL button. The volume will be reduced and the distorted sound will be suppressed. To cancel the mode, press these buttons once more.
- When the optional digital signal processor XDP-U50D is connected, the output sound from the rear speakers may be automatically lowered.

Effect Level adjustment
The balance, the level of the reflected sound and the resonance of the selected surround menu can be adjusted.

* The surround mode will be canceled. However, other preset levels of the DSP function will not be canceled.

Selecting the Surround Menu *(When the Optional Digital Signal Processor is Connected)*



1 Select a program source from tape, CD, radio or TV.

TAPE ◀II▶ TUNER VISUAL CD

2 Press the DSP button for more than one second to enter the surround menu select mode.

DSP ➡ -DEFEAT-

3 Select the desired mode with either side of the [−/+] button.

➡ HALL➡JAZZ➡DISCO➡...➡DEFEAT➡HALL➡JAZZ...

➡ CELLAR➡STADIUM➡CHURCH➡...➡JAZZ➡HALL➡DEFEAT...

CHURCH

If the "DEFEAT" mode is selected with the [−/+] button, the sound will be restored to the original state without any effects. (The "DSP" indication will disappear.)

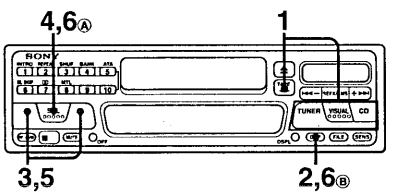
4 Press the DSP button for more than one second.

DSP

You can continue to listen with the selected surround menu.

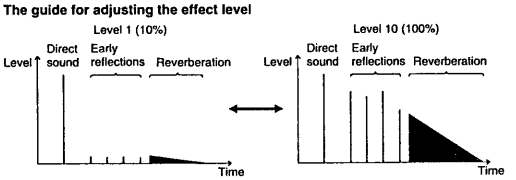
Canceling the surround menu select mode

Press the DSP button lightly. (The "DSP" indication disappears.)



The adjustable range is from 0 to 10. The larger the figure, the more live-performance-like the sound will become.

The guide for adjusting the effect level



Adjusting the Effect Level

1 Select a program source from tape, CD, radio or TV.

TAPE ◀II▶ TUNER VISUAL CD

2 Press the DSP button for more than one second to enter the surround menu select mode.

DSP ➡ -DEFEAT-

3 Select a desired surround menu with either side of the [−/+] button.

➡ HALL➡JAZZ➡DISCO➡...➡DEFEAT➡HALL➡JAZZ...

➡ CELLAR➡STADIUM➡CHURCH➡...➡JAZZ➡HALL➡DEFEAT...

CHURCH

4 Press the SEL button lightly to enter the effect level adjust mode.

SEL ➡ EFFECT 1

Note
If the "DEFEAT" mode is selected with the surround menu, the adjustment of the effect level cannot be made.

5 Press either side of the [−/+] button to select the desired level.

[−/+] ➡ EFFECT 8

6 Ⓐ **To continue to adjust the effect level of another surround menu.**
Press the SEL button lightly.

SEL

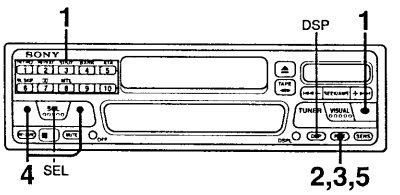
Ⓑ **To cancel the effect level adjust mode**
Press the DSP button for more than one second.

DSP

To stop the setting procedure
Press the DSP button for more than one second.

To change the effect level to the original (factory-set) setting
Press the SEL button for more than two seconds.

Registering the Surround Menu onto Discs



Once you have registered the surround menu onto the discs, you can enjoy the same surround menu every time you play these discs.

Before registering the DSP custom file, make sure that you have put the titles onto the discs (page 22).

1 **Play any disc.**

CD → INTRO 1 — 10 → [CD]

(Press for more than one second.)

2 **Press and hold the FILE button for more than two seconds to enter the name edit mode.**

FILE →

Name edit mode

If "--------" appears on the main display window, put a title onto the disc by referring to "Displaying the Title of Each Disc" on page 22.

3 **Press the FILE button lightly twice to enter the DSP file registering mode.**

FILE → DEFEAT

4 **Select the desired mode with either side of the [−/+] button.**

→ HALL→JAZZ→DISCO→...→DEFEAT→HALL→JAZZ...

→ CELLAR→STADIUM→CHURCH→...→JAZZ→HALL→DEFEAT...

CHURCH

You can register customized surround menu onto the maximum of 110 discs. See page 24 for more details.

You can use the supplied rotary commander or the optional wireless remote commander as well.

5 **Press the FILE button for more than two seconds.**

FILE

The unit enters the normal CD play mode.

Playing with the DSP Custom File Mode

Press the SEL button and DSP button simultaneously.

SEL DSP →

The "DSP"* and "FILE" indications appear on the main display window.
To return to the normal CD play mode, press both the buttons simultaneously once more.

Changing the registered surround menu

Select the disc whose surround mode you wish to alter and repeat steps 2 to 5.

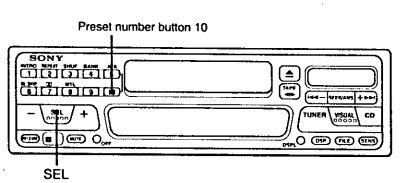
Erasing the registered surround menu

Select the DEFEAT mode in step 4 of "Registering the Surround Menu onto Discs".

If the DSP button is pressed during CD play with the DSP custom file function, the reproduced sound will become unprocessed.

* If the surround menu is not registered on a disc, the "DSP" indication will not appear.

Listening with the Same Surround Mode Every Time — LSM (Last Surround Memory) Function



LSM (Last surround memory) function

This function memorizes the selected surround menu of each program source at all times. With this function, you can always listen to the same program source with the same preset surround menu even after changing the program source or turning the unit on afresh.

Playing with the LSM Function

Press and hold the SEL button and press the preset number button 10.

SEL 10 → LSM ON

The "LSM" indication is displayed.

For example, if you listen to a disc in the "CHURCH" mode just after listening to a tape in the "HALL" mode, the next time you listen to a tape, it is automatically played in the "HALL" mode.

If you wish to cancel the LSM function, Press and hold the SEL button and then press the preset number button 10.

Adjusting the Soundfield Inside Your Car

By adjusting the followings, you can set up customized soundfields and tone quality inside your car.

- Listening position
- Sub-woofer's cutoff frequency and volume
- Bass and treble

Listening position adjustment

The time taken by the sound to reach the listener from each speaker can be adjusted. Even in an imperfect listening environment such as inside a car, it is possible to simulate the natural sound image so that a listener can feel as if he is sitting in the middle of the soundfield wherever he sits in the car.

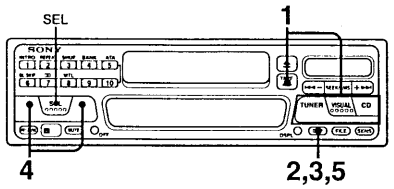
Sub woofer's cutoff frequency/volume adjustment

To match the characteristics of the connected sub woofer(s), you can cut the unwanted high and middle frequency audio signal going into the sub woofer(s). The frequency at which the audio signal is cut off is called the cutoff frequency. By setting the cutoff frequency, the sub woofer(s) is (are) able to output clearer bass whose frequency range is lower than the selected cutoff frequency. Thus creating the sound image without the variance of the phases caused by input frequencies.

Bass/treble adjustment

The volume can be adjusted by selecting the center frequencies of both the bass and treble sound to suit the acoustic characteristics inside your car.

Fader adjustment
When the optional digital signal processor XDP-U50D is connected, you can adjust the fader whether the DSP mode is on or off.



Even in an imperfect listening environment such as inside a car, it is possible to simulate a natural soundfield so that a listener can feel as if he is sitting in the middle of the soundfield wherever he sits in the car.

Selecting the Listening Positions

1 **Select a program source from tape, CD, radio or TV.**

TAPE ◄II► TUNER VISUAL CD

2 **Press the DSP button for more than one second to enter the DSP select/adjust mode.**

DSP → -DEFEAT-

3 **Press the DSP button lightly to enter the listening position adjust mode.**

DSP → ALL

4 **Press either side of the [−/+] button to select the desired position.**

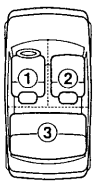
[−/+] → FRONT R

5 **To cancel the listening position adjust mode**
Press the DSP button for more than one second.

DSP

While adjusting the listening position, each time you press + side of the [−/+] button, the indication of the main (sub) display window changes cyclically as follows:

ALL (LP1)
↓
FRONT (LP2)
↓
FRONT R (LP3)
↓
FRONT L (LP4)
↓
REAR (LP5)



Sub display window	Main display window	Center of soundfield
LP1	ALL	Normal setting (①+②+③)
LP2	FRONT	Front part (①+②)
LP3	FRONT R	Front right (②)
LP4	FRONT L	Front left (①)
LP5	REAR	Rear part (③)

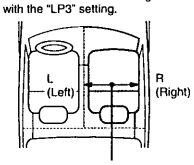
To set the listening position more specifically

1 **Select the listening position in step 4 on page 44, then press the SEL button.**
2 **The unit enters the left and right balance adjust mode. Press either side of the [−/+] button to set the center of the soundfield.**
−: moves toward L (left)
+: moves toward R (right)
3 **Press the SEL button.**
4 **The unit enters the front and rear balance adjust mode. Press either side of the [−/+] button to set the center of the soundfield.**
−: moves toward F (front)
+: moves toward R (rear)
5 **Press the DSP button for more than one second** to cancel the listening position adjust mode.

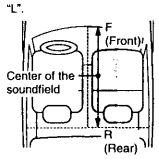
To stop the setting procedure
Press the DSP button for more than one second.

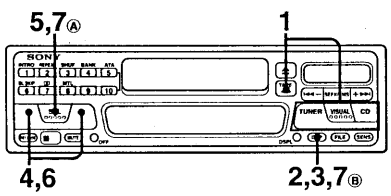
To change the cutoff frequency to the original (factory-set) setting
Press the SEL button for more than two seconds.

For example, to adjust the balance between left and right with the "LP3" setting.



For example, when the center of the soundfield is moved toward "L".





Adjusting the Cutoff Frequency and Volume of the Sub Woofer

1 **Select a program source from tape, CD, radio or TV.**

TAPE ◄II► TUNER VISUAL CD

2 **Press the DSP button for more than one second to enter the DSP select/adjust mode.**

DSP → -DEFEAT-

3 **Press the DSP button lightly to enter the cutoff frequency adjust mode.**

DSP → FREQ 62

4 **Press either side of the [−/+] button to select the desired cutoff frequency.**

[−/+] → FREQ 157

Each time you press + side of the [−/+] button, the cutoff frequency changes cyclically as follows:

62 Hz
↓
78 Hz
↓
99 Hz
↓
125 Hz
↓
157 Hz
↓
198 Hz

5 **Press the SEL button lightly.**

SEL → − DSP 0 +

6 **Press either side of the [−/+] button to select a desired setting on the main display window.**

[−] → The volume of the subwoofer(s) increase(s).

[+] → The volume of the subwoofer(s) decrease(s).

7 Ⓐ **To change the cutoff frequency**
Press the SEL button lightly.

SEL

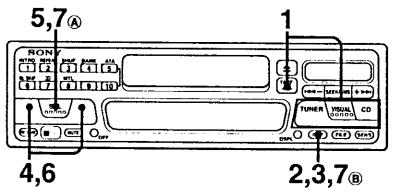
The unit returns to the cutoff frequency adjust mode.

Ⓑ **To cancel the cutoff frequency adjust mode**
Press the DSP button for more than one second.

DSP

To stop the setting procedure
Press the DSP button for more than one second.

To change the cutoff frequency to the original (factory-set) setting
Press the SEL button for more than two seconds.



You can select the center frequencies you wish to adjust for the bass and treble respectively and boost or cut their levels.

Adjusting the Bass and Treble

1 **Select a program source from tape, CD, radio or TV.**

TAPE ◀II▶ TUNER VISUAL CD

2 **Press the DSP button for more than one second to enter the DSP select/adjust mode.**

DSP → -DEFEAT-

3 **Press the DSP button lightly to select the bass or treble adjust mode.**

DSP → FREQ 250

Bass adjust mode

FREQ 4.0K

Treble adjust mode

4 **Press either side of the [−/+] button to select the center frequency.**
(The illustration below is that of the bass adjust mode.)

[−/+] → FREQ 3.1K

Each time you press + side of the [−/+] button, the center frequency for the bass sound adjustment changes cyclically as follows:

198 Hz → 250 Hz → 314 Hz → 396 Hz

Each time you press + side of the [−/+] button, the center frequency for the treble sound adjustment changes cyclically as follows:

2.0 kHz → 3.1 kHz → 4.0 kHz → 5.0 kHz

5 **Press the SEL button lightly.**

SEL → − +

6 **Press either side of the [−/+] button to select the desired level on the main display window.**

→ To boost bass or treble.

→ To cut bass or treble.

7 **Ⓐ To change the center frequency**
Press the SEL button lightly.

SEL

The unit returns to the bass or treble adjust mode.

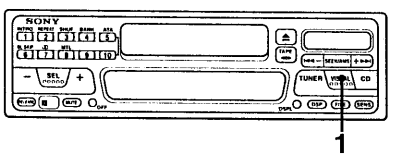
Ⓑ To cancel the bass or treble adjust mode
Press the DSP button for more than one second.

DSP

To stop the setting procedure
Press the DSP button for more than one second.

To change the bass or treble to the original (factory-set) setting
Press the SEL button for more than two seconds.

Watching Video



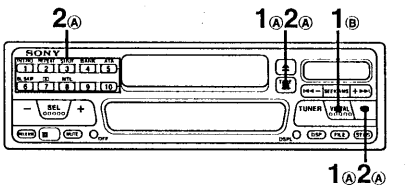
1 **Press the VISUAL button to get the "VIDEO 1" indication.**

VISUAL → VIDEO 1

You can only get the "VIDEO 2" indication if the VIDEO 2 terminal of the TV monitor is selected.

2 **Play back the video.**

Watching TV or Video while Listening to CD or Tape — Simultaneous Play Function



1 **There are two ways by which simultaneous play can be made.**

Ⓐ During TV reception or video playback:
Press the CD or TAPE ◀II▶ button for more than two seconds.
The sound from the TV or video is turned off and the sound from the CD or tape can be heard instead. However, you can continue to watch the picture on the monitor screen.

Ⓑ During CD or tape playback:
Press the VISUAL button for more than two seconds.

The TV picture appears on the monitor and you can continue to listen to the sound from the CD or tape.

2 **Ⓐ To select a desired track**
Use the buttons on the main unit or the controls on the rotary commander.

TAPE ◀II▶ CD INTRO 1 — 10

MODE

Ⓑ To select a desired TV picture or the channel
Use the buttons on the optional remote commander.

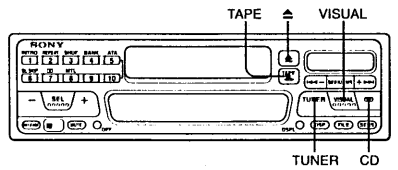
VISUAL − SEEK AMS + ⏮ ⏭ − PRESET DISC + REW FF

If you do not have the optional wireless remote commander, select a desired TV picture or the channel in step 1Ⓐ above, then press either the CD or TAPE button.

Note
The simultaneous play function will not work while you are listening to the radio.

When the unit is in the simultaneous play mode, you can still listen to the sound from the TV or video through headphones plugged into the monitor.

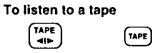
Notes
- The ATA function will not work when the unit is in the simultaneous play mode.
- The contents of the preset memories or CD information cannot be listed on the TV monitor when the unit is in the simultaneous play mode.
- If you wish to listen to tape playback, make sure that the tape deck is loaded with a cassette. If the deck is not loaded, the simultaneous play function will not work.
- When the unit is in the simultaneous play mode, CD and tape playback cannot be controlled by the optional remote commander.



Returning to the normal mode by canceling the simultaneous play mode

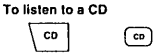
Use the buttons on the main unit or the optional remote commander.

To listen to a tape



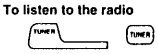
(Press for more than two seconds.)

To listen to a CD



(Press for more than two seconds.)

To listen to the radio



To watch TV or video

(Press for more than two seconds.)

The simultaneous play mode is canceled and the unit returns to the TV reception or video playback mode in the following cases

- In the case where the ⏏ button is pressed when the unit is in the simultaneous play mode with tape playback.
- In the case where the EJECT button on a CD changer is pressed when the unit is in the simultaneous play mode with CD play.

Note
You cannot cancel the simultaneous play mode with the rotary commander.

Maintenance

Fuse Replacement

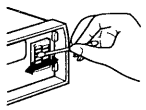
When replacing the fuse, be sure to use the one with the correct amperage which will be stated on the fuse case. Never use a fuse whose amperage rating exceeds the one supplied to the unit as this could cause a malfunction of the unit.
There are two fuses installed in this unit: one is a blade shaped fuse plugged into the back panel of the unit, the other is placed in the red power input lead.

Warning
Use the specified amperage fuse.
Use of a higher amperage fuse may cause serious damage.

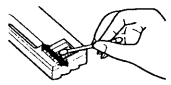
Cleaning the Connectors

The unit may not function properly if the connectors between the unit and the front panel are contaminated with dirt. In order to prevent this from happening, open up the front panel by pressing the RELEASE button then detach it and clean the connectors from time to time.

Clean the connectors with a cotton swab as illustrated. Be sure to clean them with a horizontal motion. Never clean them vertically as this could damage the connecting points.

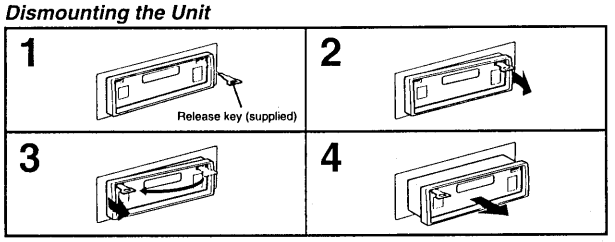


Main unit



Back of the front panel

Dismounting the Unit



Installation

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.
- Be sure to detach the front panel before you start installing the unit.
- **Press the reset button after completing the connections.**

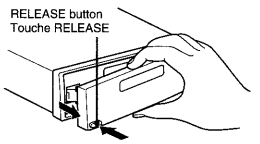
Mounting angle adjustment
Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

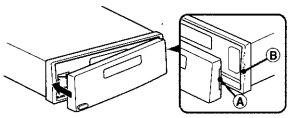
To detach
Press the RELEASE button to open up the front panel, then pull it out.

To attach
Align the parts Ⓐ and Ⓑ, and push the front panel until it clicks.

To detach
Retrait



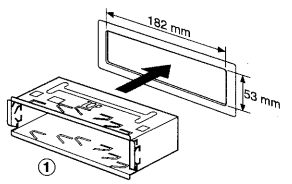
To attach
Pose



Mounting Example

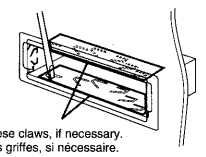
Installation in the dashboard

1



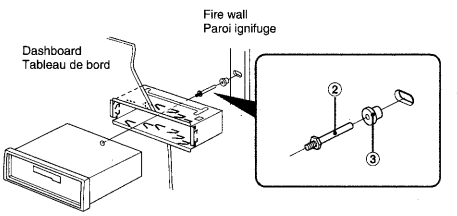
with the TOP marking up
avec l'inscription TOP vers le haut

2



Bend these claws, if necessary.
Pliez ces griffes, si nécessaire.

3

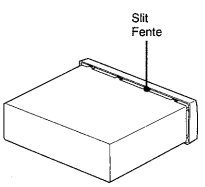


Mounting the Unit in a Japanese Car

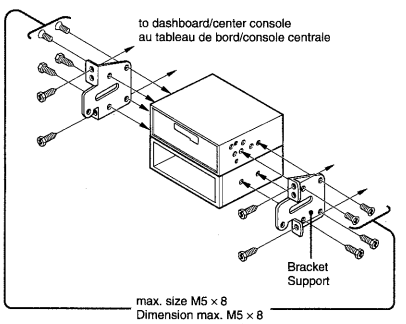
You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your nearest Sony dealer.

1 **Run a blade along the slits on the back of the front trim and cut it off the unit.**

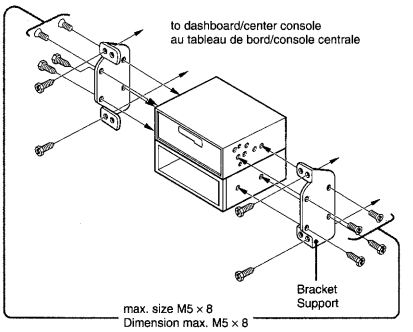
Passez une lame le long des fentes à l'arrière de la bordure et coupez-la.



2 **TOYOTA**



NISSAN

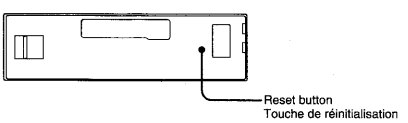


Note
Use the existing parts supplied to your car.

Remarque
Utilisez les pièces fournies avec la voiture.

Reset Button

When the installation and connections are over, be sure to press the reset button with a ball-point pen etc. The reset button is located on the left of the connector on the unit side when the front panel is detached.



Installation

Précautions

- Choisissez l'emplacement de montage avec soin de manière que l'appareil ne gêne pas les mouvements du conducteur.
- Evitez d'installer l'appareil en plein soleil, près d'une source de chaleur comme un chauffage ou dans un endroit exposé à la poussière, la saleté ou des vibrations excessives.
- Afin de garantir un montage sûr, utilisez uniquement le matériel de montage fourni.
- N'oubliez pas de détacher la façade avant d'installer l'appareil.
- **Appuyez sur la touche de réinitialisation sur la façade après avoir terminé tous les branchements.**

Réglage de l'angle de montage
Réglez l'inclinaison à un angle inférieur à 20°C.

Retrait et pose de la façade

Retrait
Appuyez sur la touche RELEASE pour ouvrir la façade, puis enlevez-la.

Pose
Alignez les points Ⓐ et Ⓑ, puis appuyez sur la façade pour qu'elle s'emboîte.

Exemple de montage

Installation dans le tableau de bord.

Installation de l'appareil dans une voiture japonaise

Si vous ne pouvez pas installer l'appareil dans une voiture japonaise, consultez votre revendeur Sony.

Touche de réinitialisation

Quand vous avez terminé l'installation et les raccordements, appuyez sur la touche de réinitialisation avec un stylo-bille ou un objet pointu. La touche de réinitialisation est située à gauche du connecteur, sur la partie de l'appareil qui se trouve derrière la façade.

Installing the Rotary Commander

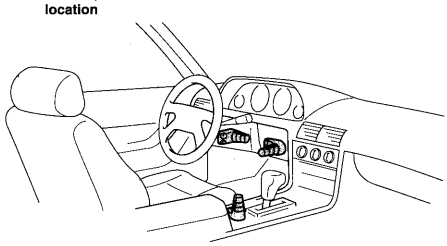
Before installation

Be sure to select the position of the operational direction switch on the bottom of the rotary commander before mounting it. See "Operational direction switch" for details. Mount the rotary commander onto a suitable place which is the most convenient position for operating it such as the steering wheel column, the dashboard or the center console etc.

Notes

- **Choose the mounting location carefully so that the rotary commander will not interfere with the normal driving condition of the driver.**
- **Do not install the rotary commander in a place where it may jeopardize the safety of the passenger in anyway.**
- **When installing the rotary commander, be sure not to damage the electrical cables etc. on the other side of the mounting surface.**
- **Avoid installing the rotary commander where it may be subject to high temperatures, such as from direct sunlight or hot air from the heater etc.**

Example of a mounting location



Installation de la manette de commande

Emplacements appropriés

Préparatifs

N'oubliez pas de choisir la position du commutateur de sens de fonctionnement se trouvant sur le socle de la manette avant d'installer la manette. Voir "Commutateur de sens de fonctionnement" pour les détails.

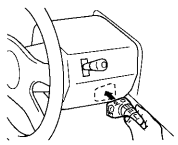
La manette de commande doit être facile à manipuler. Installez-la sur la colonne de la direction, sur le tableau de bord ou la console.

Remarques

- **Choisissez l'emplacement de la manette avec soin. Elle ne doit pas gêner les mouvements du conducteur.**
- **Fixez la manette de commande de sorte qu'elle ne mette pas les passagers en danger.**
- **Quand vous installez la manette, veillez à ne pas endommager les cordons électriques, entre autres, qui se trouvent derrière la surface de montage.**
- **Evitez d'installer la manette à un endroit exposé à de hautes températures, comme en plein soleil ou près d'une sortie d'air chaud.**

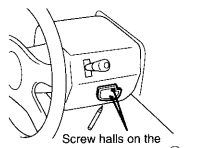
1 **Choose the exact location for the rotary commander to be mounted, then clean the mounting surface area.**

Choisissez l'endroit exact où la manette de commande doit être fixée. Nettoyez la surface de montage.



2 **Mark two positions for the supplied screws.**
Use the screw holes on the mounting hardware ⑥ to mark the positions.

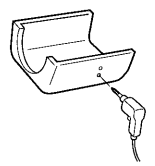
Marquez deux repères pour les vis fournies.
Utilisez les orifices du support de montage ⑥ pour marquer les repères.



Screw halls on the mounting hardware ⑥
Orifices pour les vis sur la surface de montage ⑥

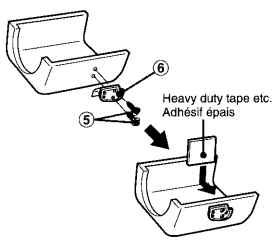
3 **Remove the steering wheel column cover and drill 2 mm diameter holes where you have marked.**

Enlevez le cache de la colonne de direction et percez des trous de 2 mm de diamètre sur les repères.



4 **Warm the mounting surface and the double-sided tape on the mounting hardware ⑥ to the temperature of 20°C to 30°C (68°F to 86°F), then attach the mounting hardware onto the mounting surface by applying even pressure. Then screw it down with the supplied screws ⑤.**

Chauffez la surface de montage et le ruban à double face adhésive sur le support ⑥ à 20°C – 30°C (68°F – 86°F), puis appliquez le support sur la surface de montage en exerçant un pression uniforme. Fixez-le ensuite avec les vis fournies ⑤.

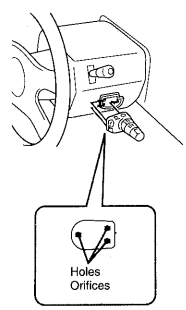


Attach a piece of heavy duty tape etc. on the other side of the mounting surface to cover the protruding tips of the screws so that they will not interfere with the electrical cables etc. inside the steering wheel column.

Collez de l'adhésif épais sur l'autre côté de la surface de montage pour recouvrir l'extrémité des vis afin qu'elles ne gênent pas les fils électriques qui passent dans la colonne.

5 **After replacing the steering wheel column cover, attach the rotary commander to the mounting hardware by aligning the three holes on the bottom of the commander to the three catches on the mounting hardware and sliding the commander until it locks into place as illustrated.**

Après avoir remis la protection, appliquez les 3 orifices sur le socle de la manette sur les trois saillies du support, puis emboîtez la manette, comme indiqué sur l'illustration.



Note
If you are mounting the commander to the steering wheel column, make sure that the protruding tips of the screws on the inner surface of the column do not in anyway hinder or interfere with the movement of the rotating shaft, operative parts of the switches or the electrical cables etc. inside the column.

Remarque
Si vous installez la manette sur la colonne de direction, vérifiez que les extrémités des vis derrière la surface de montage ne gênent pas le mouvement de l'axe, les pièces des commutateurs ou les fils électriques se trouvant dans la colonne.

Oprational direction switch

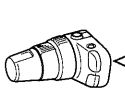
The operational direction of every control and the ◀◀/▶▶ buttons on the rotary commander may be wrong way round for you due to where the commander is mounted.
If you do not like the operational directions of the controls, change the setting of the operational direction switch which is located on the bottom of the commander. The operational directions of the controls on the commander will be the other way round.

For example, the operational directions of the controls are set so that if you rotate the VOL control toward you, the volume increases. If you change the setting of the operational direction switch, the volume will go down instead when you rotate the VOL control toward you.

Commutateur de sens de fonctionnement

Le sens de fonctionnement des commandes et des touches ◀◀/▶▶ de la manette peut être inversé en fonction de l'emplacement de montage.
Si le sens de fonctionnement des commandes ne vous convient pas, inversez-le en réglant le commutateur qui se trouve sur le socle de la manette.

Les commandes sont réglées de sorte que si vous tournez la commande VOL dans votre direction, le volume augmentera. Si vous changez le réglage du commutateur, le volume diminuera quand vous tournerez la commande dans votre direction.



1
2
Use a jewelers screwdriver etc. to change the position.
Changez la position à l'aide d'un tournevis de joailler.

Connection

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **red** power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal which is energized when the ignition key is set to the accessory position.
- **Run all ground wires to a common ground point.**

When the Unit is Used in a Car with No Accessory Position on the Ignition Key — POWER SELECT Switch

The illumination on the front panel is factory-set to be turned on even when the unit is not being played. However, this setting may cause some car battery wear **if the unit is used in a car with no accessory position on the ignition key.** To avoid this battery wear when using the unit in such a car, **set the POWER SELECT switch located on the bottom of the unit to the OFF position**. The illumination is reset to stay off while the unit is not being played.

When an FM Diversity Antenna is Used — FM DIVERSITY Switch

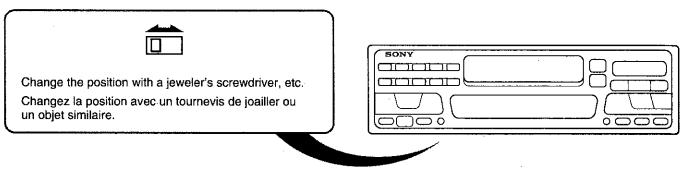
The unit can be connected with diversity antennas. If you use this unit with the diversity antennas, set the FM DIVERSITY switch located at the bottom of the unit to the ON position to activate the diversity system.

When you do not use the FM diversity antennas

If you wish to connect a conventional rod antenna, be sure to connect it to the antenna connector of the unit marked "MAIN", and set the FM DIVERSITY switch to the OFF position. Never connect the antenna to the connector marked "SUB", otherwise if the FM DIVERSITY switch is set to the ON position, the radio signals may not be received properly.

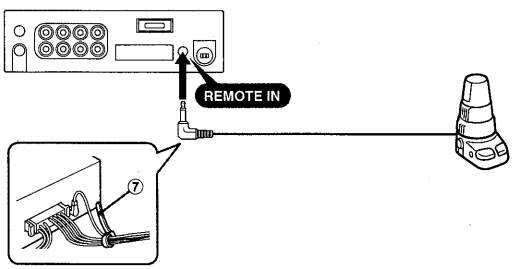
Note

The radio reception will be disturbed by noise if the connection of the antennas was not made properly or the FM DIVERSITY switch was not set correctly.


Change the position with a jeweler's screwdriver, etc.
Changez la position avec un tournevis de joailler ou un objet similaire.
SONY

When you change the position of the switch, be sure to press the reset button after the connections are completed.

Rotary Commander



To connect the plug of the rotary commander securely to the back of the unit, bundle its cord with other connecting cords with the supplied cramper ⑦ as illustrated. When bundling the cords together, make sure that you leave some leeway for the plug end of the rotary commander's cord so that the plug will not come out when other cords are pulled.

Connexions

Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Avant d'effectuer les raccordements, débranchez la borne de terre de la batterie du véhicule pour éviter tout court-circuit.
- Branchez le fil **rouge** d'entrée d'alimentation en dernier. Veillez à le raccorder à la borne d'alimentation de 12 V positive qui est alimentée quand la clé de contact est sur la position accessoire.
- **Rassemblez tous les fils de terre en un point de masse commun.**

Si l'appareil est utilisé dans une voiture dont la clé de contact n'a pas de position accessoire — Interrupteur POWER SELECT

L'éclairage de la façade est réglé en usine de manière à s'allumer même quand l'appareil ne fonctionne pas. Cependant, ce réglage risque d'épuiser la batterie si **l'appareil est utilisé dans une voiture dont la clé de contact ne possède pas de position accessoire**. Pour éviter cet inconvénient, **réglez l'interrupteur POWER SELECT sur le fond de l'appareil sur OFF**. L'éclairage est réinitialisé pour rester éteint quand l'appareil n'est pas utilisé.

Utilisation d'un antenne FM à rayonnement zénithal réduit — Interrupteur FM DIVERSITY

L'appareil peut être relié à des antennes à rayonnement zénithal réduit. Si vous utilisez ainsi l'appareil, réglez l'interrupteur FM DIVERSITY se trouvant sous l'appareil sur la position ON pour mettre le système en service.

Si vous n'utilisez pas d'antennes à rayonnement zénithal réduit

Si vous souhaitez raccorder une simple antenne-tige, veillez à la brancher sur le connecteur d'antenne "MAIN", et réglez l'interrupteur FM DIVERSITY sur la position OFF.
Ne raccordez jamais l'antenne au connecteur "SUB", sinon, si l'interrupteur est réglé sur ON, les signaux radio ne seront pas reçus correctement.

Remarque

Si le raccordement des antennes n'est pas réalisé correctement ou si l'interrupteur FM DIVERSITY n'est pas réglé sur la bonne position, des parasites gêneront la réception radio.

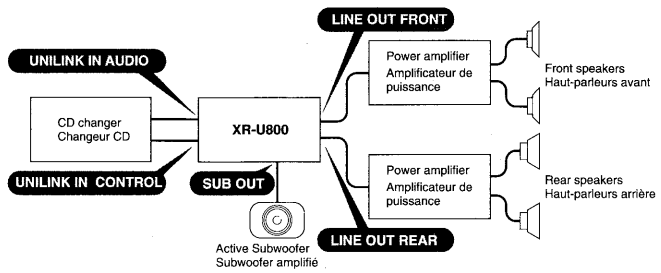
Si vous changez la position de l'interrupteur, n'oubliez pas d'appuyer sur la touche de réinitialisation après avoir terminé tous les raccordements.

Manette de commande

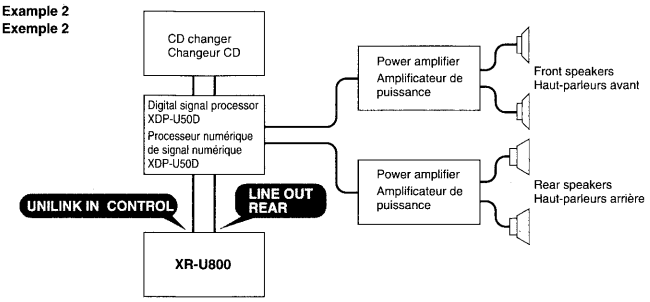
Pour que la fiche de la manette de commande ne se débranche pas de la prise à l'arrière de l'appareil, reliez son cordon aux autres cordons de raccordement avec le collier fourni ⑦, comme indiqué sur l'illustration.
Quand vous liez le faisceau, laissez un peu de jeu à l'extrémité du cordon de la manette pour que la fiche ne sorte pas de la prise quand vous enlevez d'autres cordons.

Connection Diagram/Schéma de raccordement

Example 1
Exemple 1

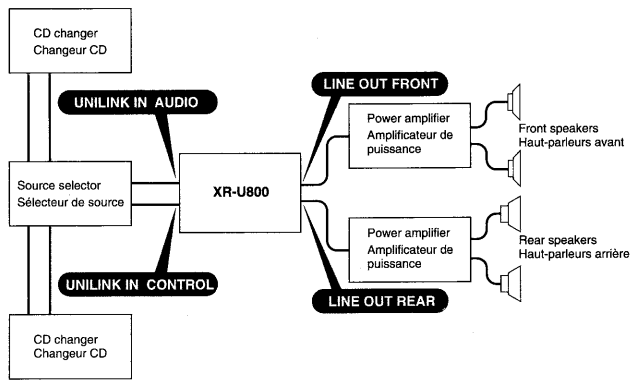


Example 2
Exemple 2



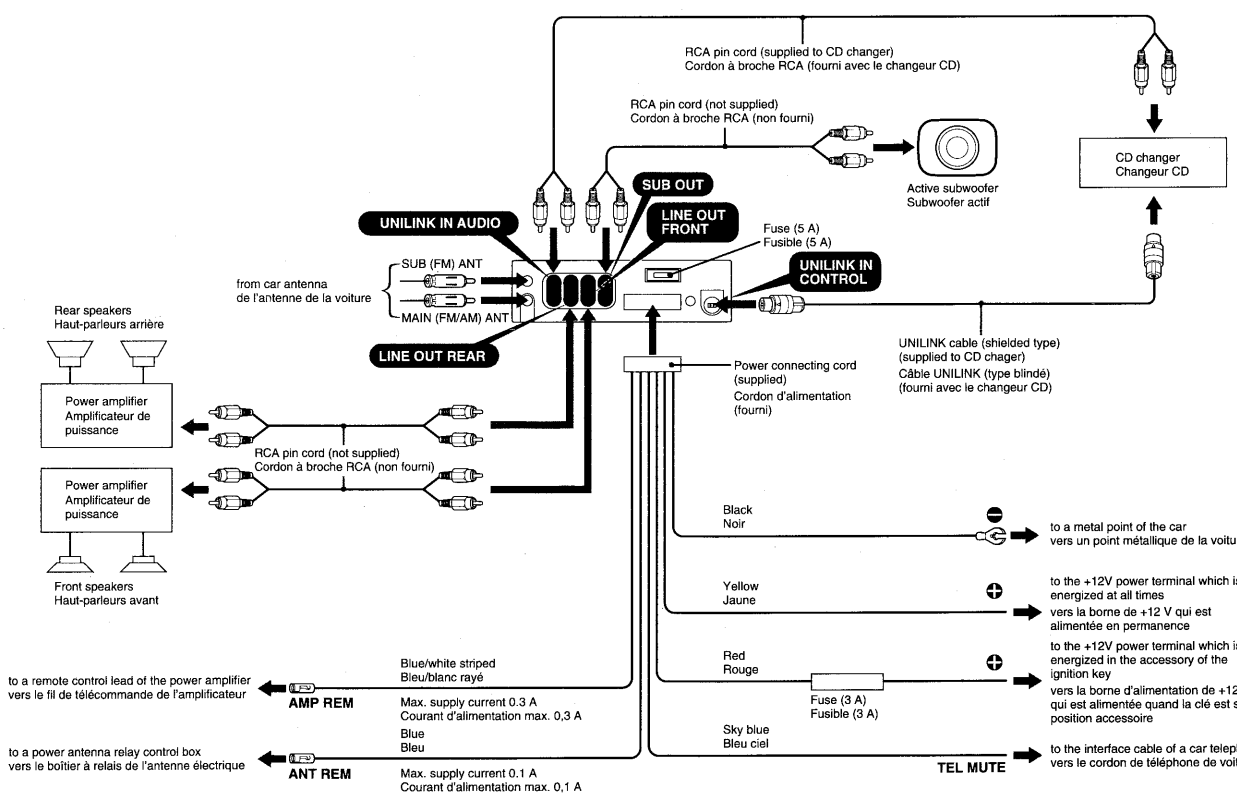
For details about the connection, refer to the operating instructions of XDP-U50D (not supplied).
Pour les détails au sujet des raccordements, veuillez consulter le mode d'emploi du XDP-U50D (non fourni).

Example 3
Exemple 3



If you connect two more CD changers, the source selector XA-U20 or XA-U40 is required.
Vous devrez utiliser le sélecteur de source XA-U20 ou XA-U40, si vous raccordez au moins deux changeurs.

Connection of Example 1/Exemple de raccordement 1


RCA pin cord (supplied to CD changer)
Cordon à broche RCA (fourni avec le changeur CD)
RCA pin cord (not supplied)
Cordon à broche RCA (non fourni)
Active subwoofer
Subwoofer actif
CD changer
Changeur CD
SUB OUT
UNILINK IN AUDIO
LINE OUT FRONT
Fuse (5 A)
Fusible (5 A)
UNILINK IN CONTROL
SUB (FM) ANT
from car antenna
de l'antenne de la voiture
MAIN (FM/AM) ANT
Rear speakers
Haut-parleurs arrière
LINE OUT REAR
UNILINK cable (shielded type)
(supplied to CD chager)
Câble UNILINK (type blindé)
(fourni avec le changeur CD)
Power connecting cord
(supplied)
Cordon d'alimentation
(fourni)
Power amplifier
Amplificateur de puissance
RCA pin cord (not supplied)
Cordon à broche RCA (non fourni)
Power amplifier
Amplificateur de puissance
Front speakers
Haut-parleurs avant
Black
Noir
to a metal point of the car
vers un point métallique de la voiture
Yellow
Jaune
to the +12V power terminal which is energized at all times
vers la borne de +12 V qui est alimentée en permanence
Red
Rouge
to the +12V power terminal which is energized in the accessory of the ignition key
vers la borne d'alimentation de +12 V qui est alimentée quand la clé est sur la position accessoire
Fuse (3 A)
Fusible (3 A)
to a remote control lead of the power amplifier
vers le fil de télécommande de l'amplificateur
Blue/white striped
Bleu/blanc rayé
AMP REM
Max. supply current 0.3 A
Courant d'alimentation max. 0,3 A
to a power antenna relay control box
vers le boîtier à relais de l'antenne électrique
Blue
Bleu
ANT REM
Max. supply current 0.1 A
Courant d'alimentation max. 0,1 A
Sky blue
Bleu ciel
TEL MUTE
to the interface cable of a car telephone
vers le cordon de téléphone de voiture

Notes on the control leads
- The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) function.
- A power antenna without relay box cannot be used with this unit.

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

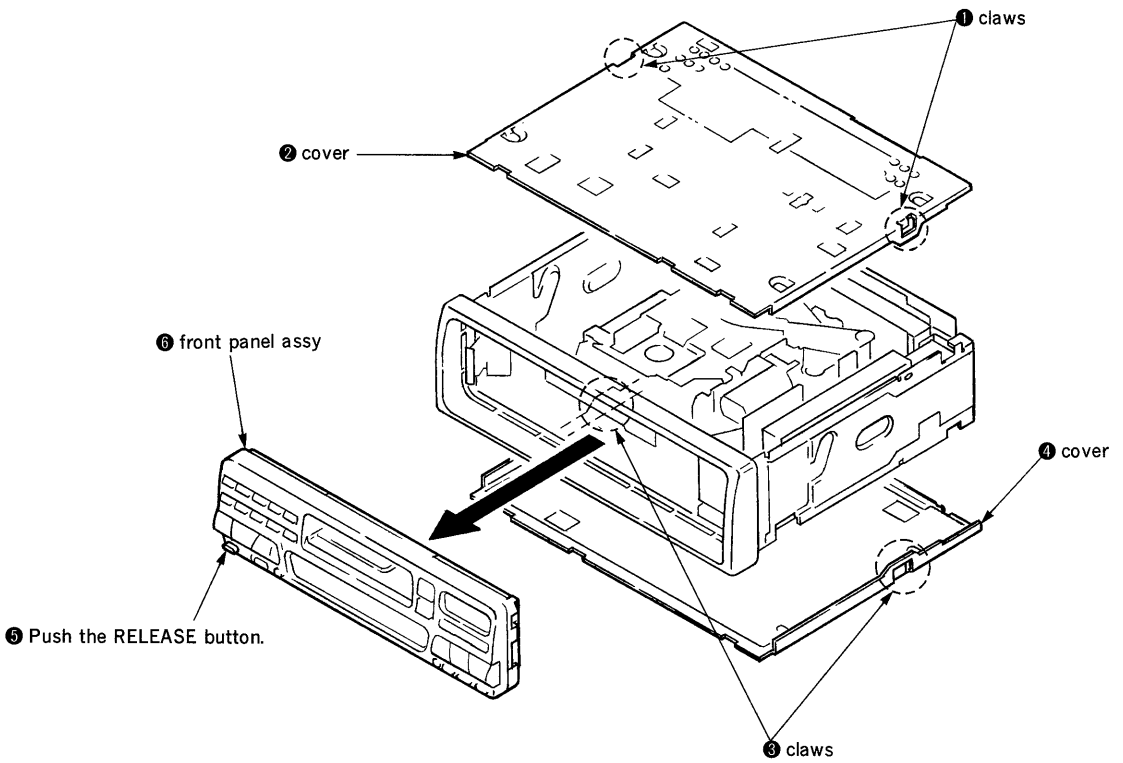
Remarques sur les fils de contrôle de l'antenne
- Le fil de contrôle de l'antenne électrique (bleu) fournit un courant continu de +12 V quand vous mettez l'appareil sous tension ou utilisez la fonction ATA (Automatic Tuner Activation).
- Vous ne pouvez pas utiliser d'antenne électrique sans boîtier de relais.

Raccordement pour la conservation de la mémoire
Si vous raccordez le fil d'alimentation jaune, la mémoire sera toujours alimentée même si la clé de contact est sur la position d'arrêt.

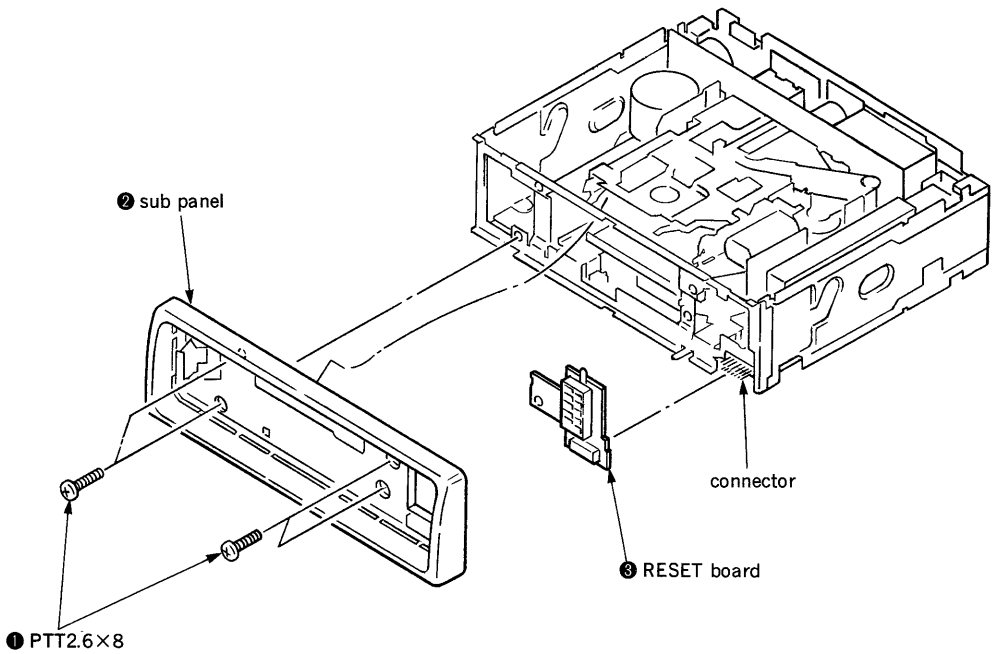
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

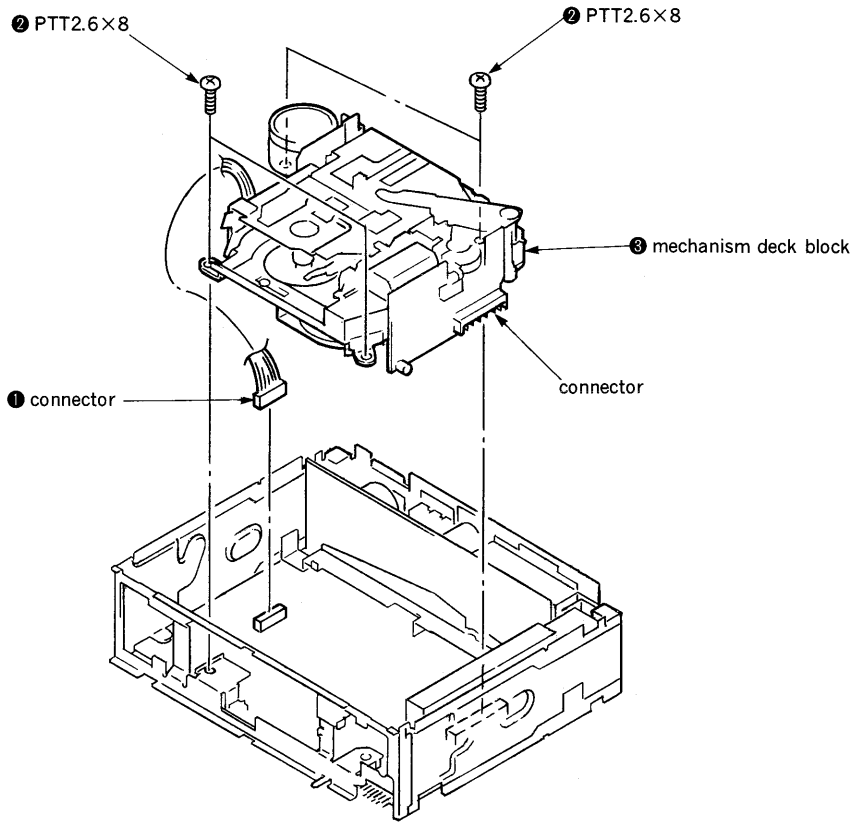
2-1. COVER, FRONT PANEL ASSY



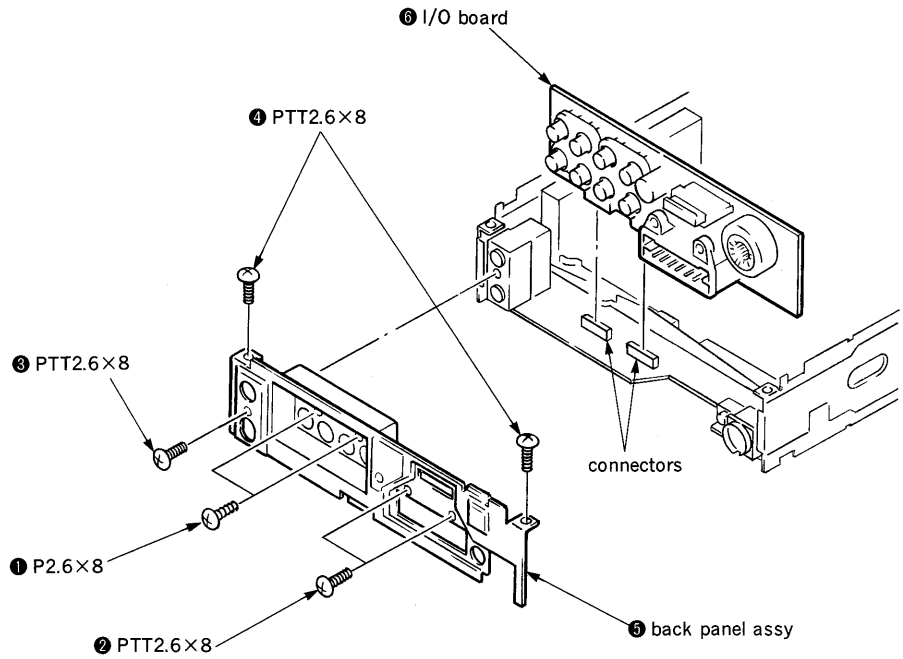
2-2. RESET BOARD



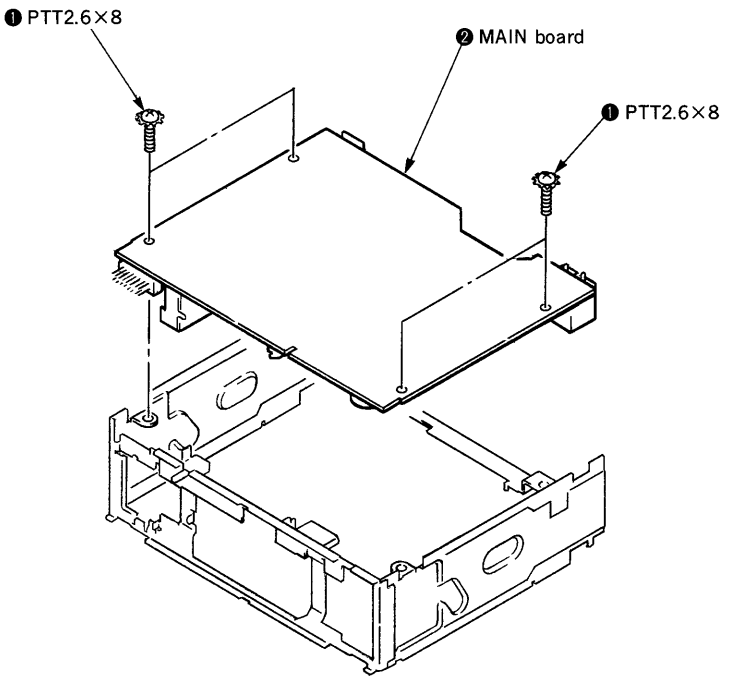
2-3. MECHANISM DECK BLOCK



2-4. I/O BOARD



2-5. MAIN BOARD



SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment:
   PB head　　Pinch roller
   Idler　　Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35−55g•cm (0.49−0.76 oz•inch)
FWD Back Tension		1.5−4.5g•cm (0.02−0.06 oz•inch)
REV	CQ-102RC	35−55g•cm (0.49−0.76 oz•inch)
REV Back Tension		1.5−4.5g•cm (0.02−0.06 oz•inch)
FF, REW	CQ-201B	80−170g•cm (1.11−2.36 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100g (more than 3.53 oz)
REV	CQ-403R	

SECTION 4
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM Auto Scan/Stop Level adjustments can be performed easier than it in ordinaly procedure.

〈Set the Test Mode〉

1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for two seconds.
5. Then the display indicates five patterns and stops, the test mode is set.

〈Rerease the Test mode〉

1. Push the "OFF" button.

See the adjustment location from on page 27 for the adjustment.

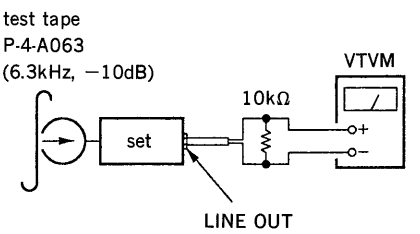
DECK SECTION

0dB=0.775V

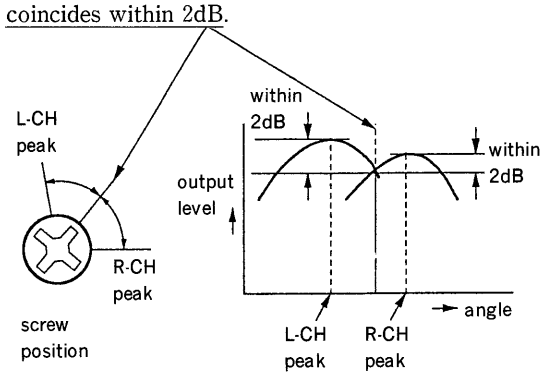
PB Head Azimuth Adjustment

Procedure :

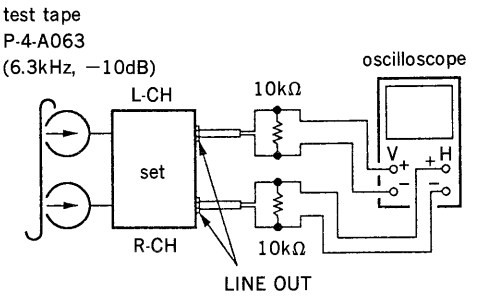
1. Put the set into the FWD PB mode.

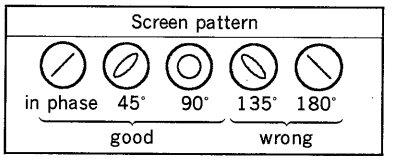


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2dB.



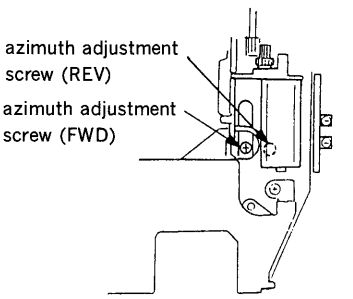
3. Check the phase in the PB mode.





4. Repeat the above adjustment for the REV PB mode.

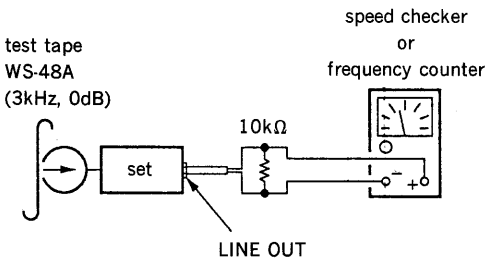
Adjustment Location : PB head



Capstan Motor Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.



Specification : Constant speed

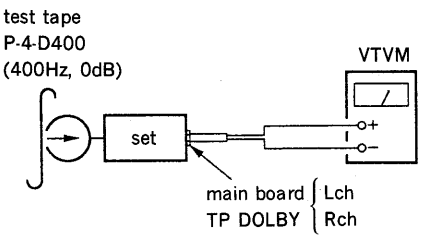
Speed checker	Frequency counter
−1.5 to +2.5%	2,955 to 3,075Hz

Adjustment Location : capstan motor volume

DOLBY Level Adjustment

Setting :

(Dolby NR) button : OFF
SEL (volume) button : Maximum
SEL (balance) button : Center
SEL (bass) button : Center
SEL (treble) button : Center



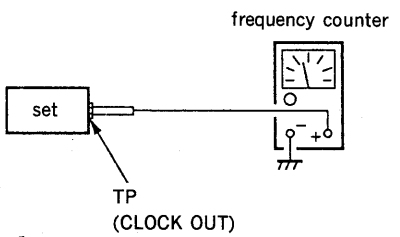
Procedure :

1. Put the set into the FWD PB mode.
2. Adjust RV301 (L-CH) and RV401 (R-CH) so that VTVM reading is $-4.7\,^{+1.0}_{0}$ dB (0.45 to 0.51V).

Adjustment Location : equalizer board

Microcomputer Clock Adjustment

Setting :



Procedure :

1. Set to the test mode. (See page 23.)
2. Adjust with CT501 for 16,384.0±0.1Hz (61.0351msec± 0.0003μsec) reading on frequency counter.

Adjustment Location : main board

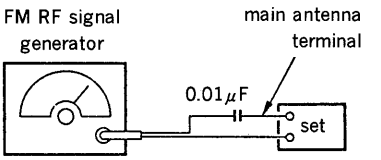
TUNER SECTION | 0dB=1μV

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment

Setting :

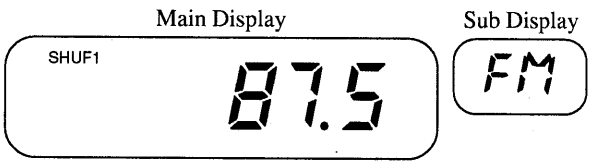
TUNER button : FM



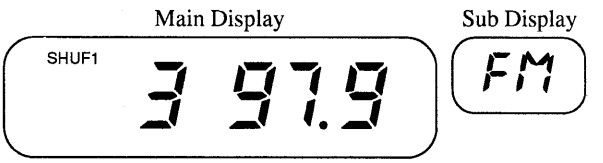
Carrier frequency : 97.9MHz
Output level : 22dB (12.6μV)
Mode : mono
Modulation : no modulation

Procedure :

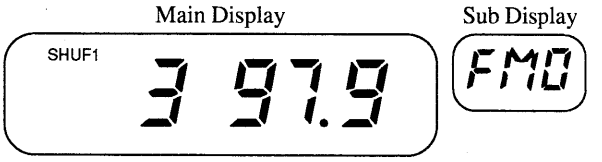
1. Set to the test mode. (See page 23.)
2. Push the TUNER button and set to FM.



3. Push the preset 3 button.



4. Push the SEEK/AMS+▶▶| button.
5. Adjust with the volume RV3 on TU1 so that the "FM" indication turns to "FM0" indication on the sub display window.
   But, in case of already indicated "FM0", turn the RV3 so that put out light "0" indication and adjustment.



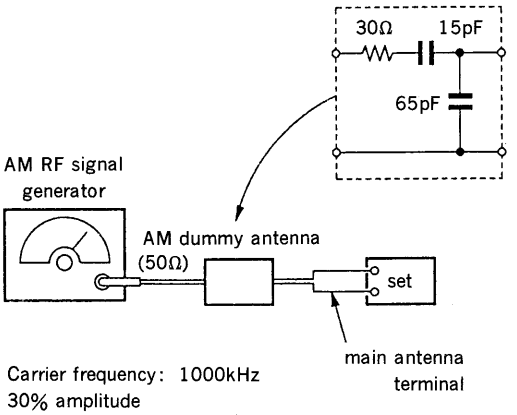
Specification : Stop sensitivity : 22dB±3dB

Note) "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V →"0" light off
TP (SD) voltage 5V →"0" light on

AM Auto Scan/Stop Level Adjustment

Setting :

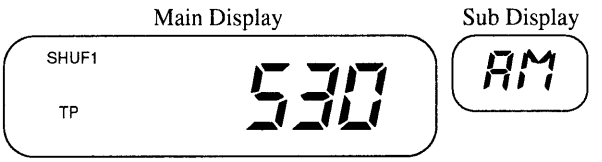
TUNER button : AM



Carrier frequency: 1000kHz
30% amplitude modulation by 400Hz signal
Output level : 33dB (44.7μV)

Procedure :

1. Set to the test mode. (See page 23.)
2. Push the [TUNER] button and set to AM.



3. Push the preset [3] button.

4. Adjust with the volume RV1 on TU1 so that the "AM" indication turns to "AM0" indication on the sub display window.
   But, in case of already indicated "AM0", turn the RV1 so that put out light "0" indication and adjustment.

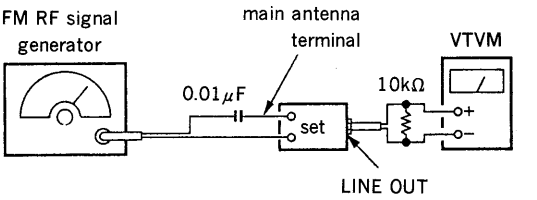
Specification : Stop sensitivity : 33dB±3dB

Note) "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V →"0" light off
TP (SD) voltage 5V →"0" light on

High Cut Control Effect Adjustment

Setting :

TUNER button : FM



Carrier frequency: 97.9MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 1kHz, 75kHz deviation

Procedure :

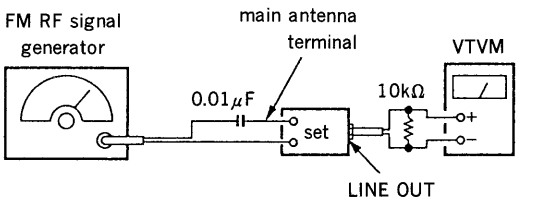
1. Tune the 97.9MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV2 on TU1 so that the output level is (A)−6dB then signal generator input set to 20dB.

Adjustment Location : main board (TU1)

FM Noise Focus Adjustment

Setting :

TUNER button : FM



Carrier frequency: 97.9MHz
Output level : 60dB (1mV)
Mode : mono
Modulation : 10kHz, 75kHz deviation

Procedure :

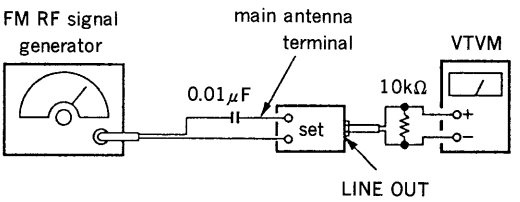
1. Tune the 97.9MHz.
2. The then output level is supposing that (B) dB.
3. Adjust with the volume RV5 on TU1 so that the output level is (B)−30dB then signal generator input set to 20dB.

Adjustment Location : main board (TU1)

FM Stereo Separation (60dB) Adjustment

Setting :

BAND switch : FM



Carrier frequency : 97.9MHz
Output level : 70dB (3.2mV)
Mode : stereo
Modulation : main : 1kHz, 33.75kHz deviation (45%)
sub : 1kHz, 33.75kHz deviation (45%)
19kHz pilot : 7.5kHz deviation (10%)

Procedure :

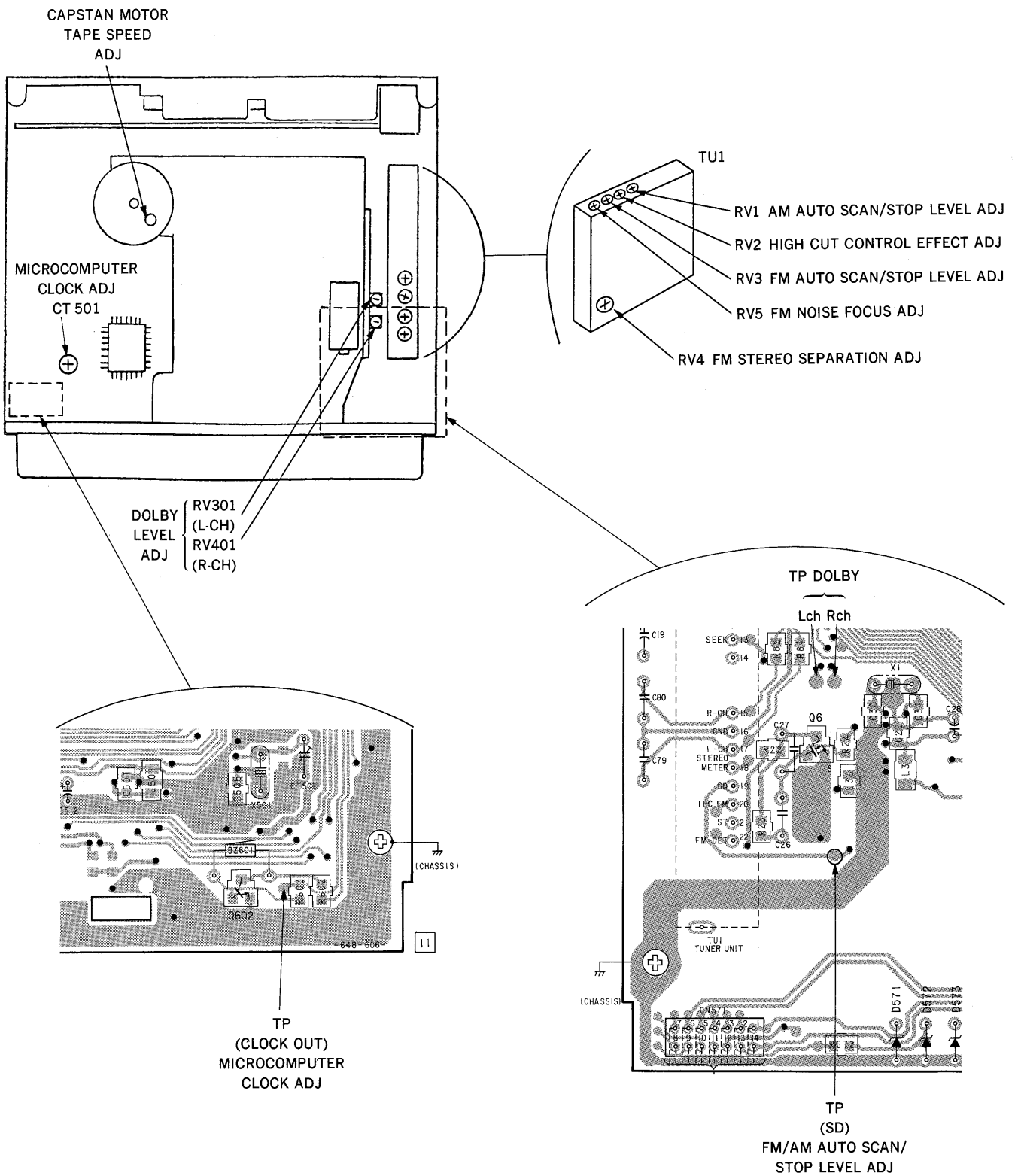
FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 for minimum

L-CH Stereo separation : Ⓐ−Ⓑ
R-CH Stereo separation : Ⓒ−Ⓓ
The separations of both channels should be equal.

Specification : Separation more than 30dB

Adjustment Location : main board (TU1)

Adjustment Location :



SECTION 5
DIAGRAMS

5-1. PIN FUNCTIONS

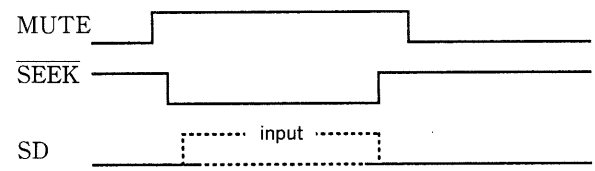
• IC501 μPD75518GF-131-3B9

Pin No.	Signal	Pin Name	I/O	Pin Function
1	KEY-IN0	KI0	I	KEY input
2	P-ON 5V (Ref)	AVDD	—	A/D reference voltage of KEY input.
3, 4	VDD	VDD	—	B/U 5V power
5	KEY-ACTIVE	KEY-ACT	I	ON for A/D port. H : Possible the KEY input.
6	P-ON	P-ON	O	When the POWER ON to output the H. To ON for AUDIO and AMP-REM.
7	ILL-ON	ILL-ON	O	When the ACC ON to output the H. To ON for illumination and LCD.
8	COLOR	COLOR	O	Select the illumination color. H : Green, L : Yellow
9	MUTE	MUTE	O	MUTING output. MUTE ON : H output
10	AUX-MUTE	AUX-MUTE	O	Not use
11	DOLBY $\overline{\text{OFF}}$/ON	DOLBY-$\overline{\text{OFF}}$/ON	O	ON/OFF signal output of DOLBY NR. ON : H, OFF : L
12	DOLBY $\overline{\text{B}}$/C	DOLBY-$\overline{\text{B}}$/C	O	Select signal output of DOLBY NR.
13	SUB-CLK	SUB. VOL-CLK	O	Control output at SUB VOLUME IC304. Control at LCD DRIVER IC701.
14	SUB-DATA	SUB. VOL-DATA	O	
15	SUB-CE	SUB. VOL-CE	O	
16	LCD-INH	LCD-INH	O	
17	—	NC	—	
18	LCD-DATA	LCD-DATA	O	
19	LCD-CLK	LCD-CLK	O	
20	LCD-CD	LCD-CD	O	
21	VOL-CE	VOL-CE	O	Control output at ELECTRONIC VOLUME IC301
22	AMP-ON	AMP-ON	O	Control output at ELECTRONIC VOLUME IC301
23	VOL-CLK	CLK. OUT-VOL	O	Control output at ELECTRONIC VOLUME IC301
24	VOL-DATA	DATA. OUT-VOL	O	
25	TAPE MUTE	TAPE MUTE	O	When to MUTING for TAPE, output H.
26	METAL	MTL	O	METAL : H, NORMAL : L
27	LM-EJECT	EJECT	O	Control output at LOADING MOTOR. EJECT : H, LOAD : L
28	LM-LOAD	LOAD	O	
29	POS 3	POS 3	I	TAPE POSITION detection input
30	POS 2	POS 2	I	
31	POS 1	POS 1	I	
32	POS 0	POS 0	I	
33	GND	GND	—	GND
34	REEL2	REEL 2	I	TAPE rotation detection input. Only one side input : Judge the no tape. Both no input : Judge the tape end.
35	REEL1	REEL 1	I	
36	N/$\overline{\text{R}}$	NOR/$\overline{\text{REV}}$	I	DIRECTION signal input of TAPE, H : Forward, L : Reverse
37	$\overline{\text{AMS IN}}$	$\overline{\text{AMS-IN}}$	I	AMS signal input. L : Tune, H : No tune
38	PL-OUT	PL-OUT	O	Plunger drive control output. H : ON
39	CM-OUT	CM-OUT	O	For capstan motor output
40	SUB-VOL SELECT	$\overline{\text{SUB. VOL-SEL}}$	O	Select for SUB-VOL function. L : SUB VOL, H : None
41	T-POL	ST-IN	—	Normally, fixed L (GND).

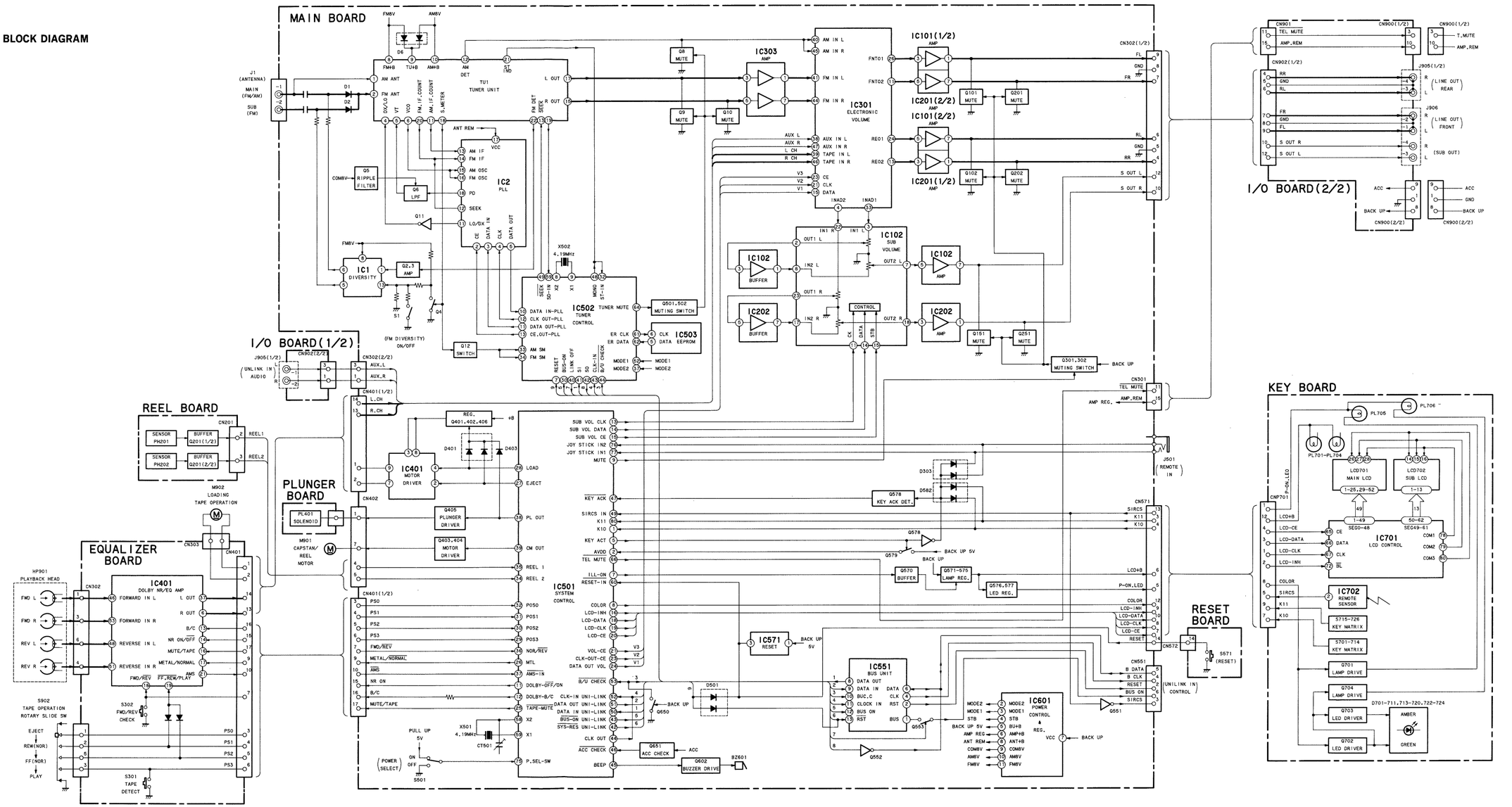
Pin No.	Signal	Pin Name	I/O	Pin Function
42	SYSTEM RESET	$\overline{\text{SYS-RES}}$ UNI-L	O	For UNILINK output
43	BUS ON	$\overline{\text{BUS-ON}}$ UNI-L	O	
44	CLK-OUT	CLK-OUT	O	
45	BEEP	BEEP	O	Buzzer output
46	$\overline{\text{ACC-CHECK}}$	$\overline{\text{ACC-CHECK}}$	I	ACC detection input
47	KEY-ACKIN	$\overline{\text{KEY-ACK}}$	I	When the this set is sleep mode, detect to pressing key.
48	—	JOYSTICK-ACK	—	Not use
49	$\overline{\text{SIRCS IN}}$	$\overline{\text{SIRCS-IN}}$	I	Remote commander signal input
50	DATA IN	DATA-IN UNI. LINK	I	For UNILINK input/output
51	DATA OUT	DATA-OUT UNI. LINK	O	
52	CLK-IN	CLK-IN UNI-LINK	I	
53	B/U-CHECK	$\overline{\text{B/U-CHECK}}$	I	B+ voltage detection input
54	GND	GND	—	GND
55, 56	—	XT1, XT2	—	Not use
57	GND	IC	—	GND
58	X1	X1	O	Crystal oscillator connect pin (4.19MHz)
59	X2	X2	I	
60	$\overline{\text{RESET}}$	$\overline{\text{RESET-IN}}$	I	Microcomputer RESET input
61	ANT ON	ANT-REM	—	Not use
62—64	—	—	—	Not use
65	—	SD-IN	—	Fix the L (GND)
66	—	$\overline{\text{TEL. MUTE}}$	—	Fix the H
67	—	CAUTION-SEL	—	Fix the L (GND)
68	—	NOSE-SW	—	Fix the H
69, 70	—	MODE1, MODE2	—	Not use
71	AUDIO SEL 1	AUD. SEL. 1	—	
72	AUDIO SEL 2	AUD. SEL. 0	—	
73	A/D GND	ANALOG. GND	—	GND
74	EQ ON	EQ-ON	O	EQ control output. H : SUB and FAD control, L : No output
75	POWER SELECT	P. SEL-SW	I	P-SEL input. H : ACC match, L : No ACC
76	Joistick-IN2	JOYSTICK-IN2	I	Rotary commander input
77	Joistick-IN1	JOYSTICK-IN1	I	Rotary commander input
78	DSP	$\overline{\text{DSP}}$	I	DSP control select input. L : Use
79	TV	$\overline{\text{TV}}$	I	TV control select input. L : Use
80	KEY-IN1	KI1	I	KEY input

• IC502 μPD75116GF-G50-3BE

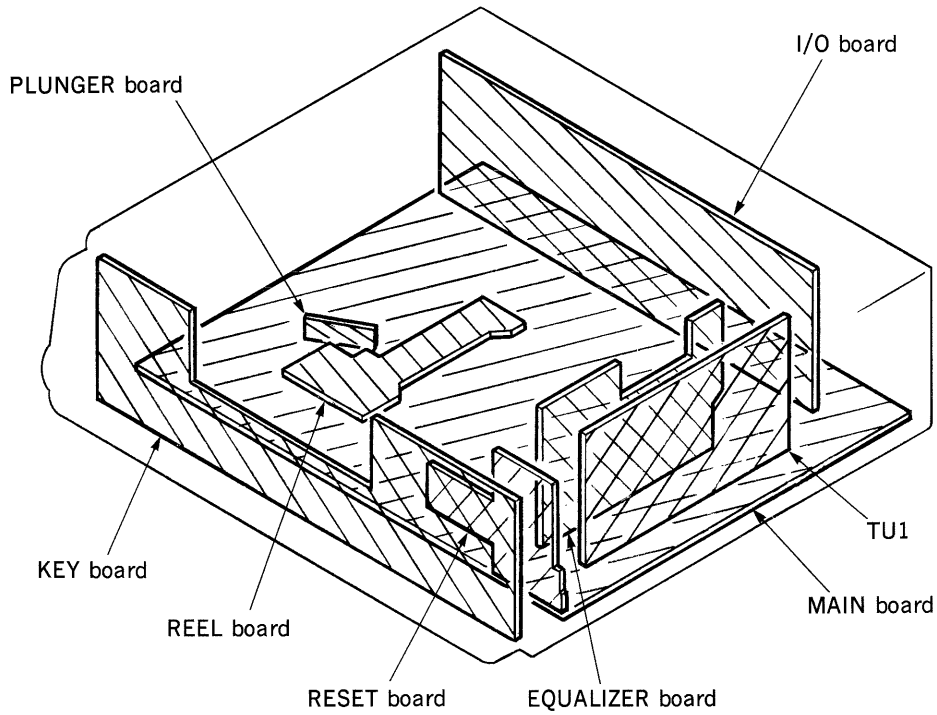
Pin No.	Signal	Pin Name	I/O	Pin Function
1, 2	P41, P40	—	—	Not use
3—6	P53—P50	GND	—	Not use (GND)
7	RESET	$\overline{\text{RESET}}$	I	RESET input (L : RESET)
8	X2	X2	I	Ceramic oscillator connect pin (4.19MHz)
9	X1	X1	O	
10	PLL-DI	DATA. IN-PLL	I	DATA input from IC2 PLL-IC LC7216.
11	PLL-DO	DATA. OUT-PLL	O	DATA output to IC2 PLL-IC LC7216.
12	PLL-CK	CLK. OUT-PLL	O	CLOCK output to IC2 PLL-IC LC7216.
13	PLL-CE	CE. OUT-PLL	O	Chip enable output to IC2 PLL-IC LC7216.
14	P73	MS7$\overline{\text{XR}}$/XT	I	MODE select input (PULL-UP 5V)
15	P72	MS6	I	MODE select input (Not use GND)
16	P71	MS5 (E2ROM-RST)	I	
17	P70	MS4 (AM-ST)	I	
18	P83	MS3	I	
19	P82	MS2	I	
20	P81	MS1	I	
21	P80	MS0	I	
22	RDS-DI	—	I	Not use (GND)
23	RDS-D-Start	—	I	
24	RDS-ERR	—	I	
25	RDS-Receive	—	I	
26	VSS	VSS	—	GND
27	P13	—	I	Not use (GND)
28	P12	—	I	
29	RDS-CLK	—	I	
30	BUS-ON	$\overline{\text{BUS-ON}}$	I	BUS-ON input from BUS INTERFACE IC501 μPD75518GF.
31	PTH3	—	—	Not use
32	PTH2	$\overline{\text{ST-IN}}$	I	STEREO input
33	Vsm (FM)	FM. SM	I	FM S meter voltage detection
34	Vsm (AM)	AM. SM	I	AM (MW/SW/LW) S meter voltage detection
35, 36	T10, T11	—	—	Not use
37	ANFON	MODE 2	O	ANT-ON (TUNER ON) output
38	$\overline{\text{RDS-RESET}}$	RDS-RST	O	Not use
39	REQUEST	REQUEST	O	BUS INTERFACE request output
40	LINK-OFF	LINK-OFF	O	BUS INTERFACE rink off output
41	S1	S1	I	BUS INTERFACE DATA input
42	S0	S0	O	BUS INTERFACE DATA output
43	SCK	CLK-IN	I	BUS INTERFACE CLOCK input
44	BUP	B/U-CHECK	I	BUCK UP detection input
45	DX/LOCAL	$\overline{\text{DX}}$/LO	O	Not use
46, 47	P22, P21	—	—	Not use
48	N-CH	$\overline{\text{MONO}}$	O	FORCE MONAURAL output
49	$\overline{\text{SEEK}}$ • N-CH	$\overline{\text{SEEK}}$	O	SEEK OUT output
50	P132	—	—	Not use

Pin No.	Signal	Pin Name	I/O	Pin Function
51	$\overline{\text{FM-FE-ON}}$	—	O	Not use
52	$\overline{\text{AM-FE-ON}}$	MODE 1	O	AM power control output
53	P143	—	—	Not use
54	P142	—	—	Not use (GND)
55, 56	P141, P140	—	—	Not use
57	NC	V_{DD}	—	BACK UP +5V
58	SD	V_{DD}	—	IC power
59	SD	SD-IN	I	SD IN pin Decide on stop level of SEEK, AUTO-MEMORY and SCAN, etc. ON AM receipt (MUTE-OFF), output for "L" level. 
60		—	—	Not use (GND)
61	NC E²P-SCK	ER. CLK	O	EEP ROM clock output to IC503 X24C04S8IC7000.
62	NC E²P-SDA	ER. DATA	I/O	EEP ROM DATA input to IC503 X24C04S8IC7000.
63	P43	—	—	Not use
64	MUTE	TUNER-MUTE	O	MUTING signal output

5-2. BLOCK DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



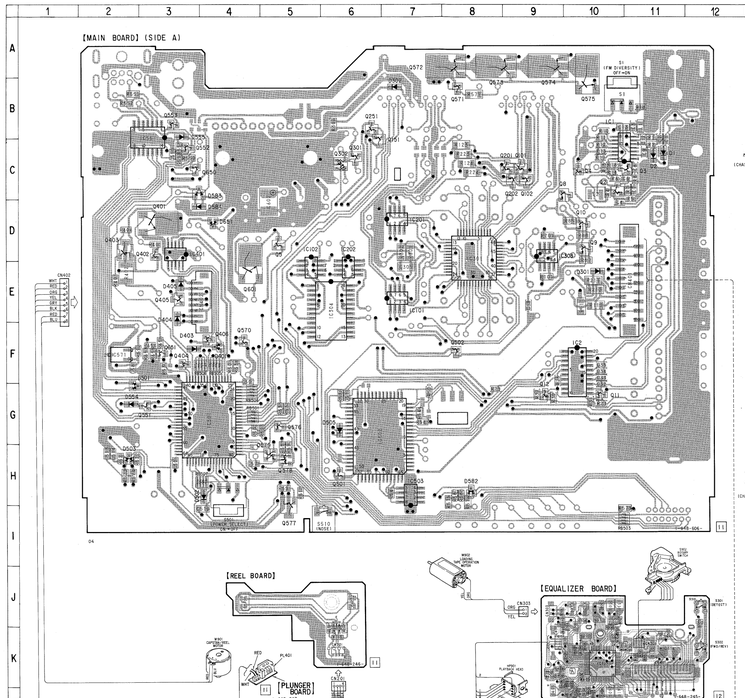
5-4. PRINTED WIRING BOARDS —MAIN SECTION— • Refer to page 54 for Semiconductor Lead Layouts.

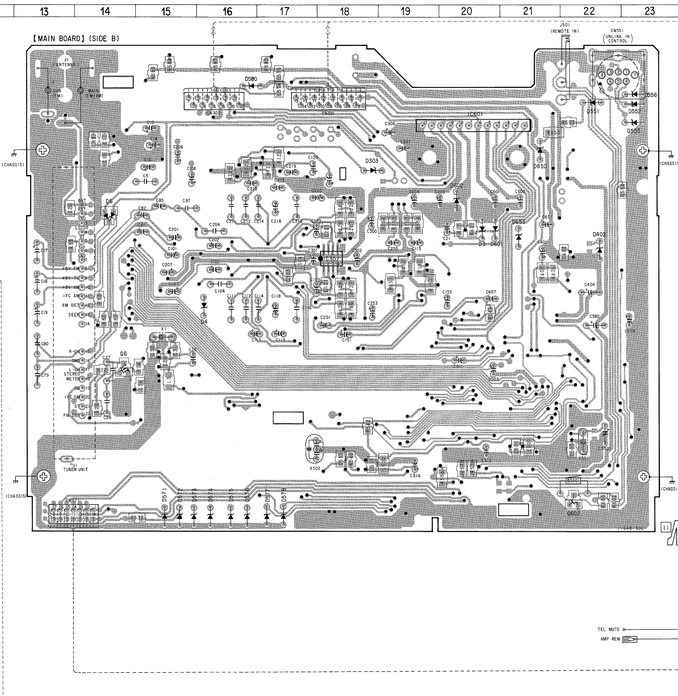
• Semiconductor Location

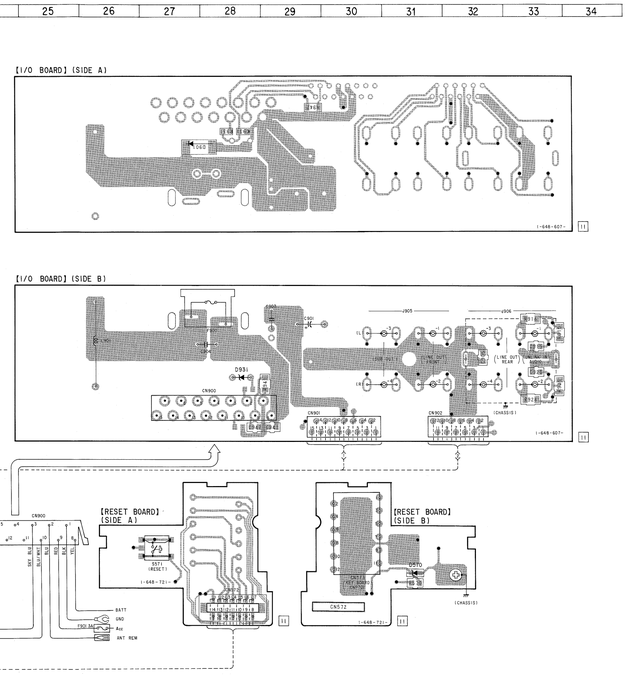
Ref. No.	Location	Ref. No.	Location
D1	C-11	IC401	D-3
D2	C-11	(IC401)	K-10
D3	D-20	IC501	G-4
D4	E-16	IC502	G-6
D6	D-14	IC503	H-7
D301	E-10	IC551	B-3
(D301)	K-11	IC571	F-2
D302	B-7	IC601	B-20
(D302)	K-11		
D303	C-18	PH201	J-4
(D303)	J-12	PH202	J-6
D401	F-4		
D402	D-22	Q2	C-10
D403	F-3	Q3	C-10
D404	E-3	Q4	C-10
D405	E-3	Q5	D-5
D501	G-2	Q6	F-14
D502	H-4	Q8	C-9
D503	H-2	Q9	D-10
D505	G-6	Q10	D-10
D551	B-22	Q11	G-10
D552	B-23	Q12	G-9
D553	B-23	Q101	C-9
D554	G-2	Q102	C-9
D555	B-3	Q151	C-6
D556	B-23	Q201	C-9
D570	J-31	(Q201)	J-6
D571	I-15	Q202	C-9
D572	I-15	Q251	B-6
D573	I-15	Q301	C-6
D574	I-16	Q302	C-6
D575	I-16	Q401	D-3
D576	I-16	Q402	D-3
D577	I-17	Q403	D-2
D578	I-17	Q404	F-3
D580	B-16	Q405	E-3
D582	H-8	Q406	F-4
D583	C-3	Q501	H-6
D584	D-3	Q502	F-8
D601	D-20	Q551	G-3
D602	D-20	Q552	C-3
D650	C-21	Q553	B-3
D651	D-4	Q570	F-4
D653	D-21	Q571	B-8
D901	C-27	Q572	A-8
D931	F-28	Q573	A-8
		Q574	A-9
IC1	C-10	Q575	B-10
IC2	F-10	Q576	G-5
IC101	E-7	Q577	I-5
IC102	E-5	Q578	H-5
IC201	D-7	Q579	H-5
IC202	E-6	Q601	E-4
IC301	D-8	Q602	H-22
IC302	D-18	Q650	C-3
IC303	D-9	Q651	F-3
IC304	E-6		

( ): MECHANISM BLOCK

Note:
- ○—— : parts extracted from the component side.
- ● : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.







5-5. SCHEMATIC DIAGRAM —MAIN SECTION— • Refer to page 53 for IC Block Diagrams.

Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ): AM
  < >: PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇦ : PB

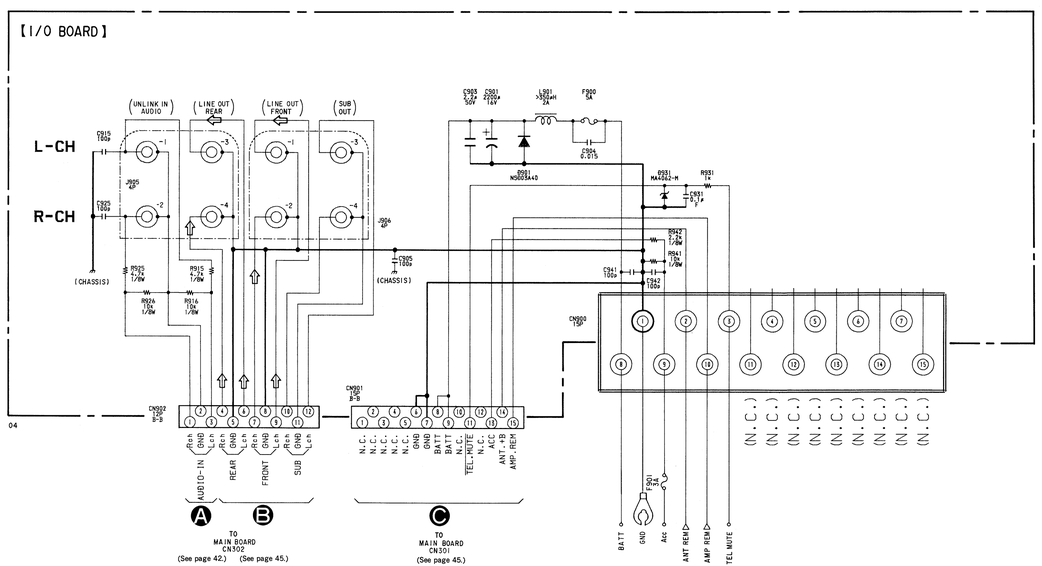
【MAIN BOARD】

【EQUALIZER BOARD】

【REEL BOARD】

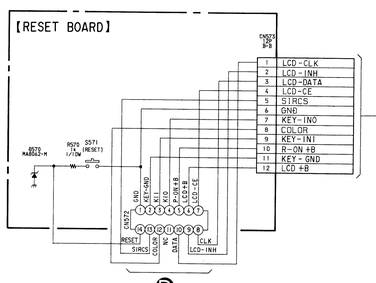
【PLUNGER BOARD】

5-6. SCHEMATIC DIAGRAM —I/O SECTION—

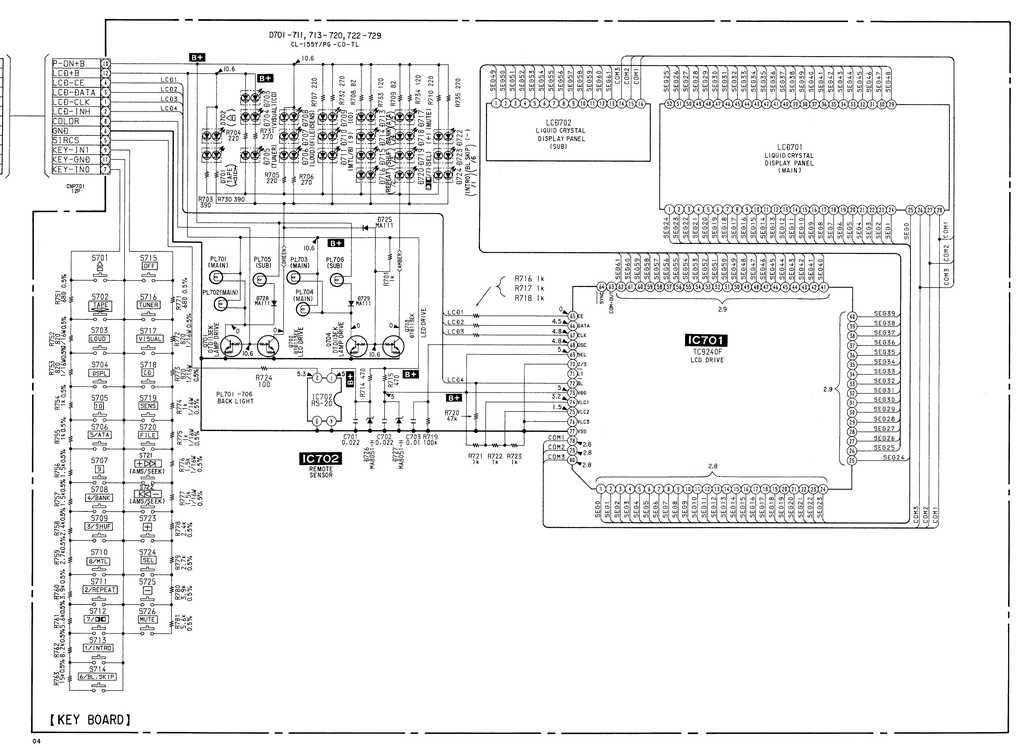


Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- Signal path.
  ⇨ : FM

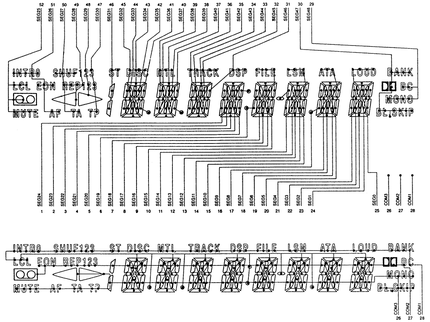
5-7. SCHEMATIC DIAGRAM —PANEL SECTION—



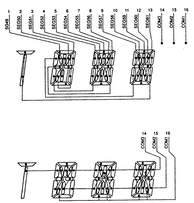
Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.



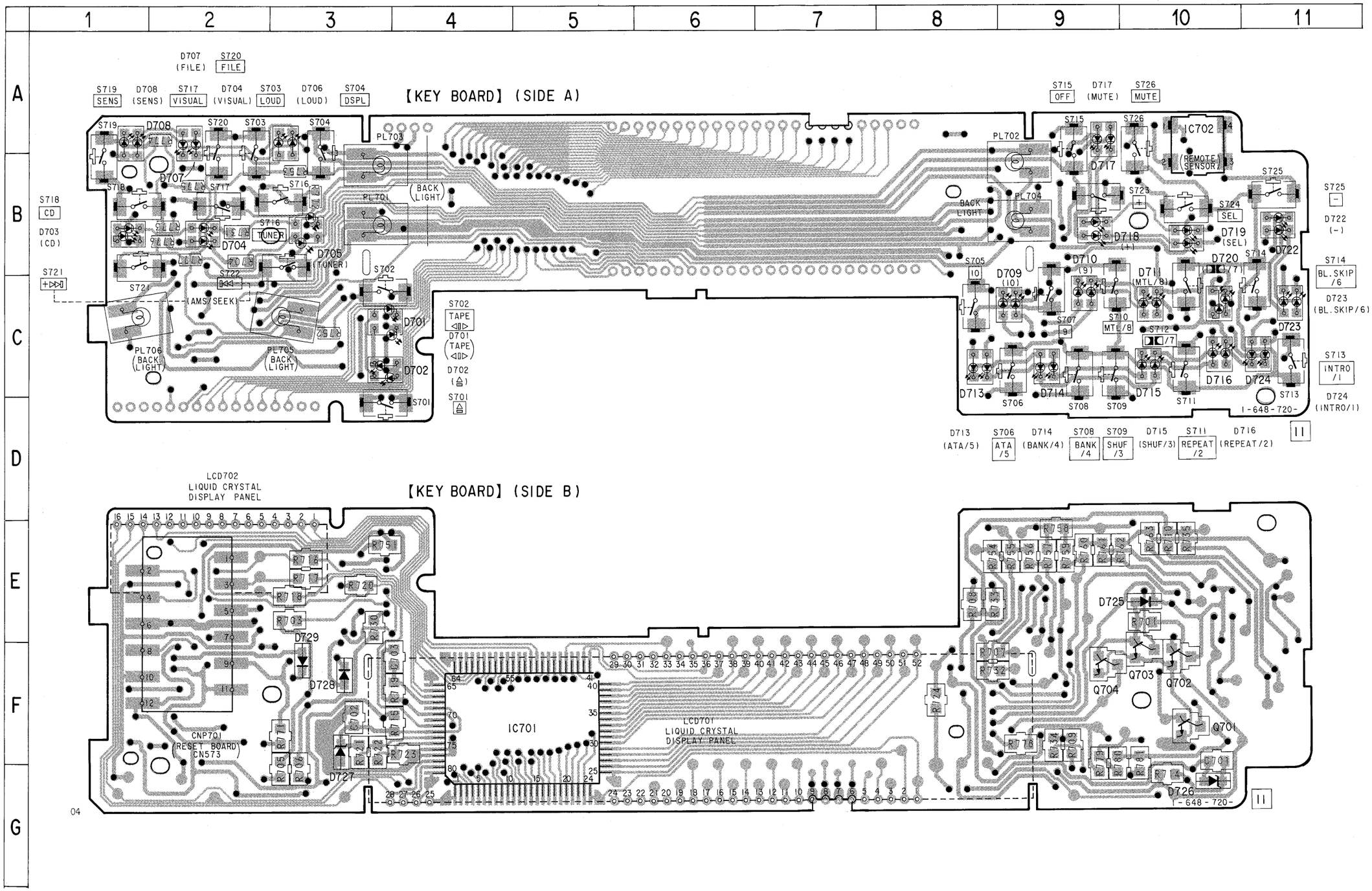
- LCD701 (MAIN)



- LCD702 (SUB)



5-8. PRINTED WIRING BOARD —PANEL SECTION— • Refer to page 54 for Semiconductor Lead Layouts.



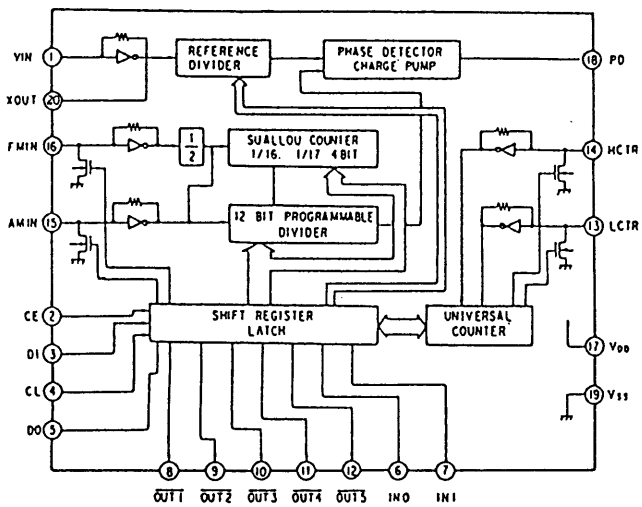
• Semiconductor Location

Ref. No.	Location
D701	C-3
D702	C-3
D703	B-1
D704	B-2
D705	B-3
D706	A-3
D707	A-2
D708	A-1
D709	C-9
D710	C-9
D711	C-10
D713	C-8
D714	C-9
D715	C-10
D716	C-10
D717	A-9
D718	B-9
D719	B-10
D720	C-10
D722	B-11
D723	C-11
D724	C-11
D725	E-10
D726	G-10
D727	F-3
D728	F-3
D729	F-3
IC701	F-5
IC702	A-10
Q701	F-10
Q702	F-10
Q703	F-10
Q704	F-9

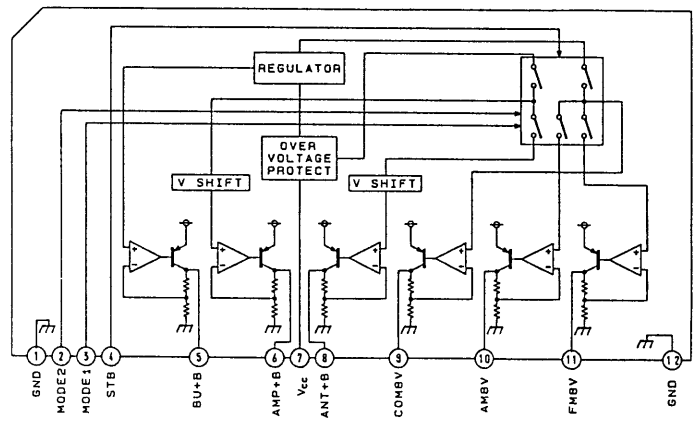
Note:
- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.

• IC Block Diagrams

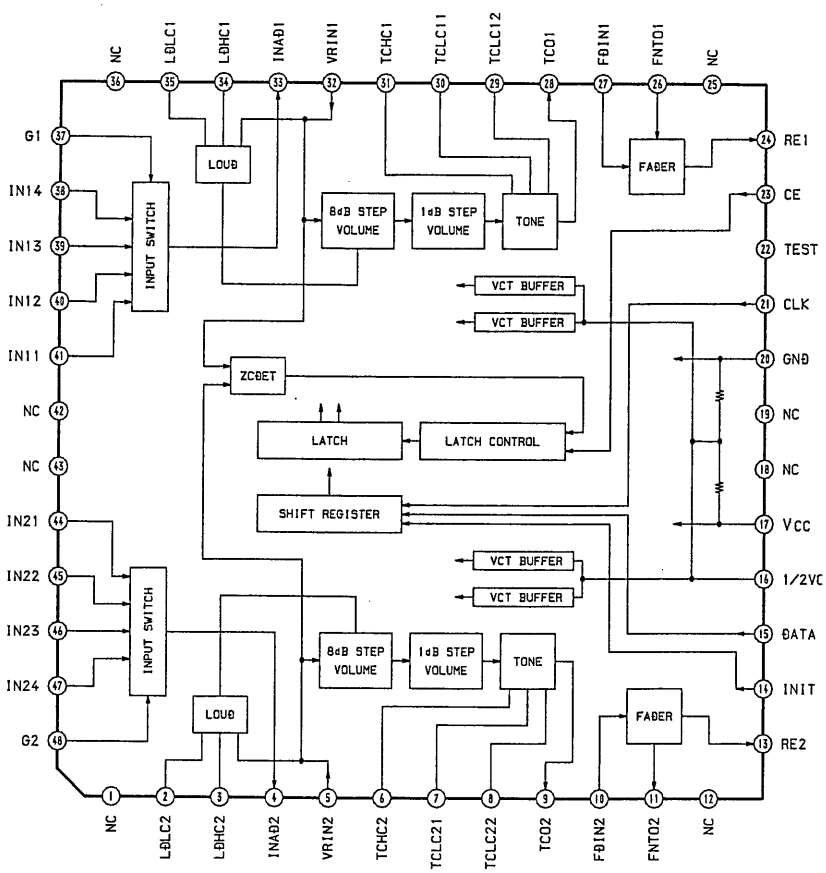
IC2 LC7216M



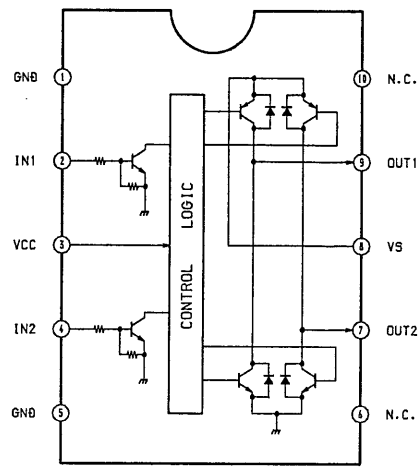
IC601 BA3910A-V2



IC301 CXA1646Q

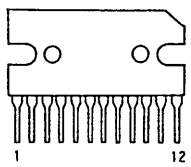


IC401 LB1638M

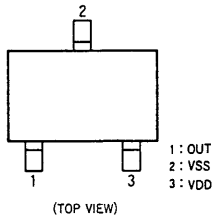


5-9. SEMICONDUCTOR LEAD LAYOUTS

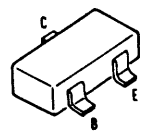
BA3910B-V2



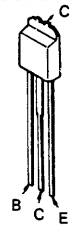
PST600EMT



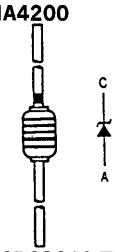
DTD113EK
RN1441A-TE85L
UN211F-TX
UN2211
UN2215-QRS
UN5111-TX
UN5113
UN5211-TX
2SA1586-YG
2SC2712-YG
2SC4116GL-TE85L



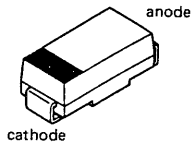
2SC3073-Y



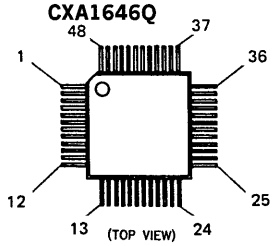
MA4039-M
MA4056-L
MA4062-M
MA4068-L
MA4075-M
MA4082-H
MA4091-H
MA4110-M
MA4200



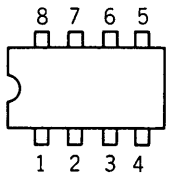
NSD03A40-TE16L



CXA1646Q



RC5532M



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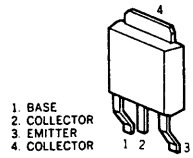

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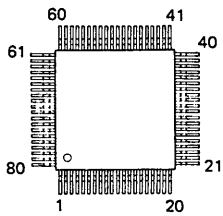
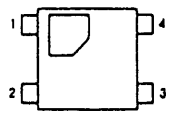
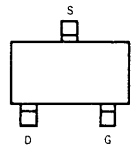


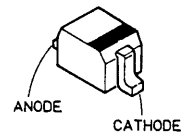
RS-20



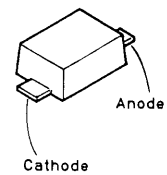
2SK1657-B



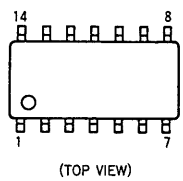
MA111
MA8051-H
MA8062-M



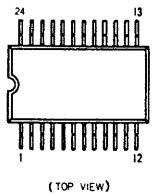
1SS314-TPH3



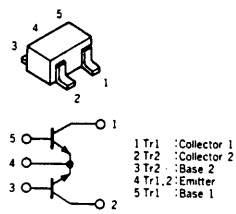
LA1061M



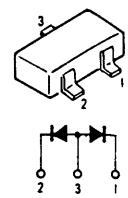
TC9212F



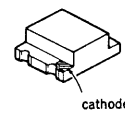
FMG1
XN1213



MA142WA



CL-155Y/PG-CD



LB1638M
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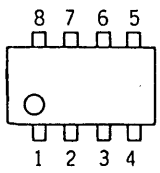
X24C04S8IC7000



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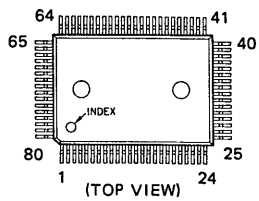
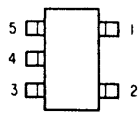
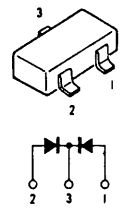


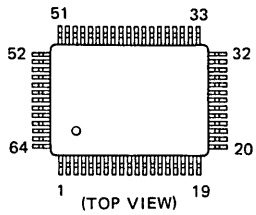
UPA502T
XN1A312-TX



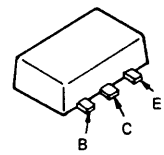
MA141WK
MA142WK
MA721WK



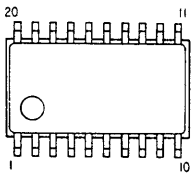
μPD75116GF-G50-3BE



2SB1115A



LC7216M

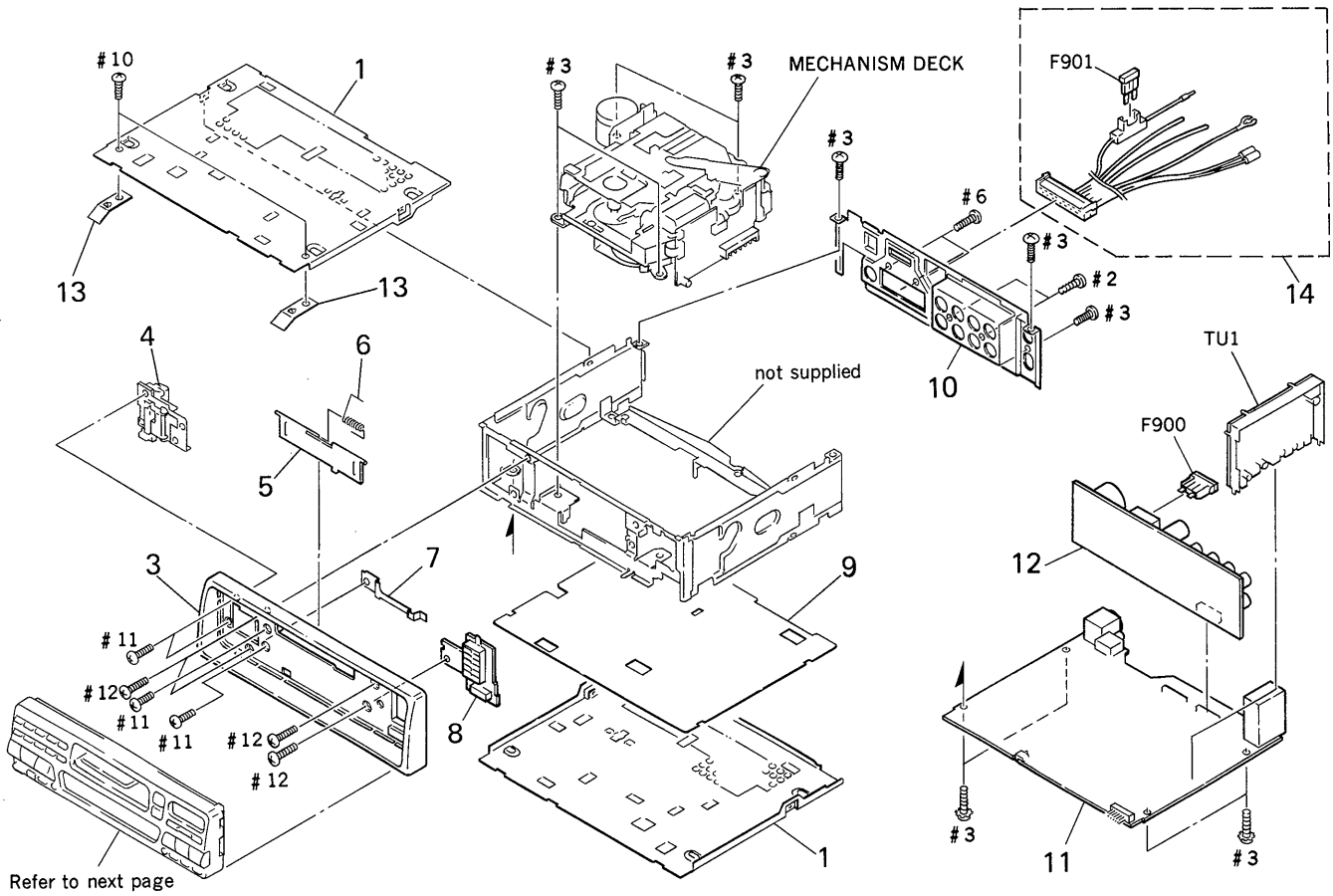


SECTION 6
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list is given in the last of this parts list.

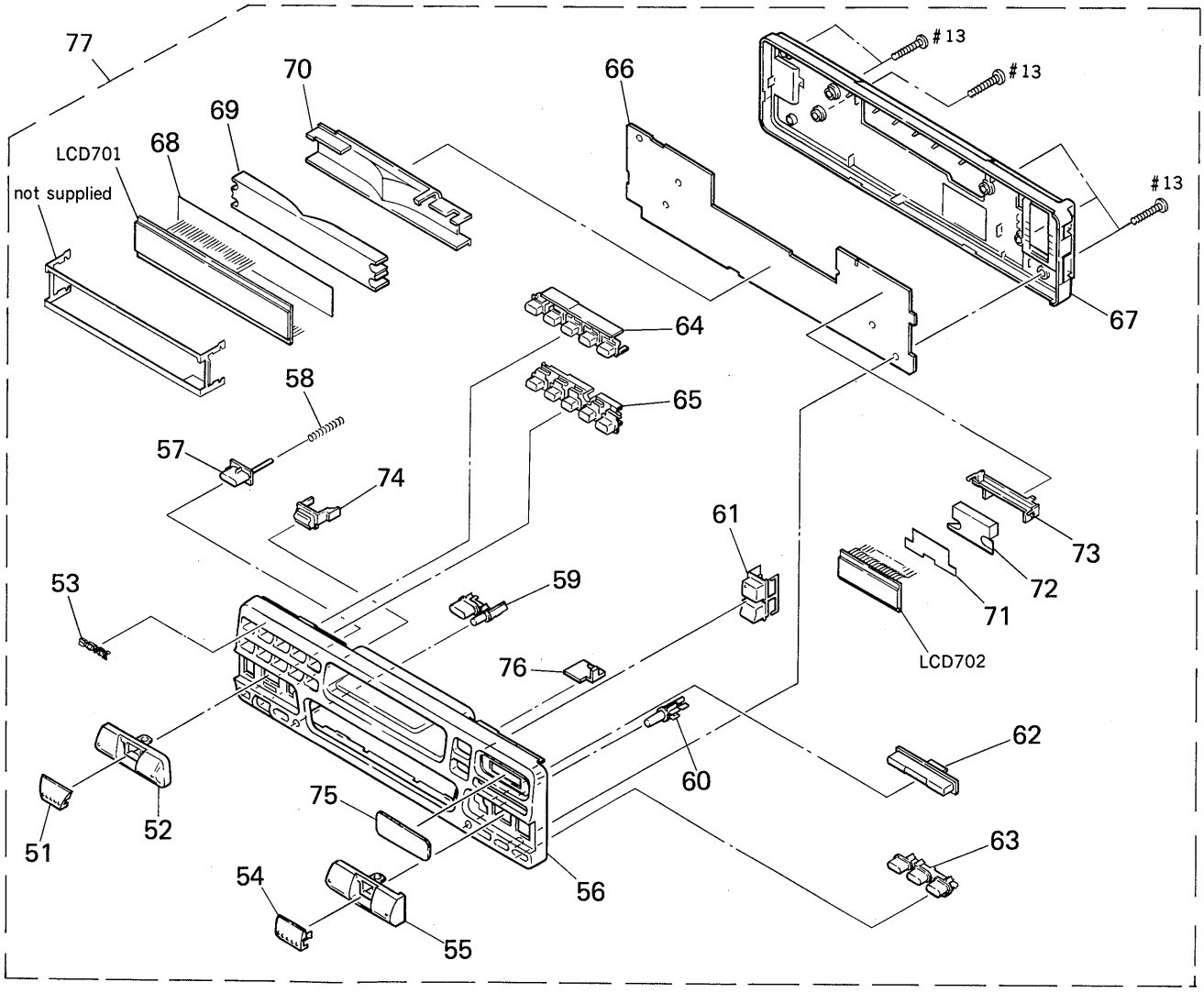
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-904-249-11	COVER	
3	3-904-179-01	PANEL, SUB	
4	X-3364-564-1	LOCK ASSY	
5	3-389-269-31	DOOR, CASSETTE	
6	3-377-892-01	SPRING (C DOOR), TORSION	
7	3-904-181-01	SPRING (SW)	
* 8	1-648-719-11	RESET BOARD	
* 9	3-904-180-01	INSULATOR	

Ref. No.	Part No.	Description	Remark
* 10	X-3366-876-1	PANEL ASSY, BACK	
* 11	A-3295-562-A	MAIN BOARD, COMPLETE	
* 12	A-3295-564-A	I/O BOARD, COMPLETE	
* 13	3-386-597-01	PLATE, LOCK	
14	1-751-264-11	CORD (WITH CONNECTOR)	
F900	1-533-328-11	FUSE (BLADE TYPE) (AUTO FUSE) (5A)	
F901	1-533-326-11	FUSE (BLADE TYPE) (AUTO FUSE) (3A)	
* TU1	A-3295-309-A	TUNER UNIT (TUX-001)	

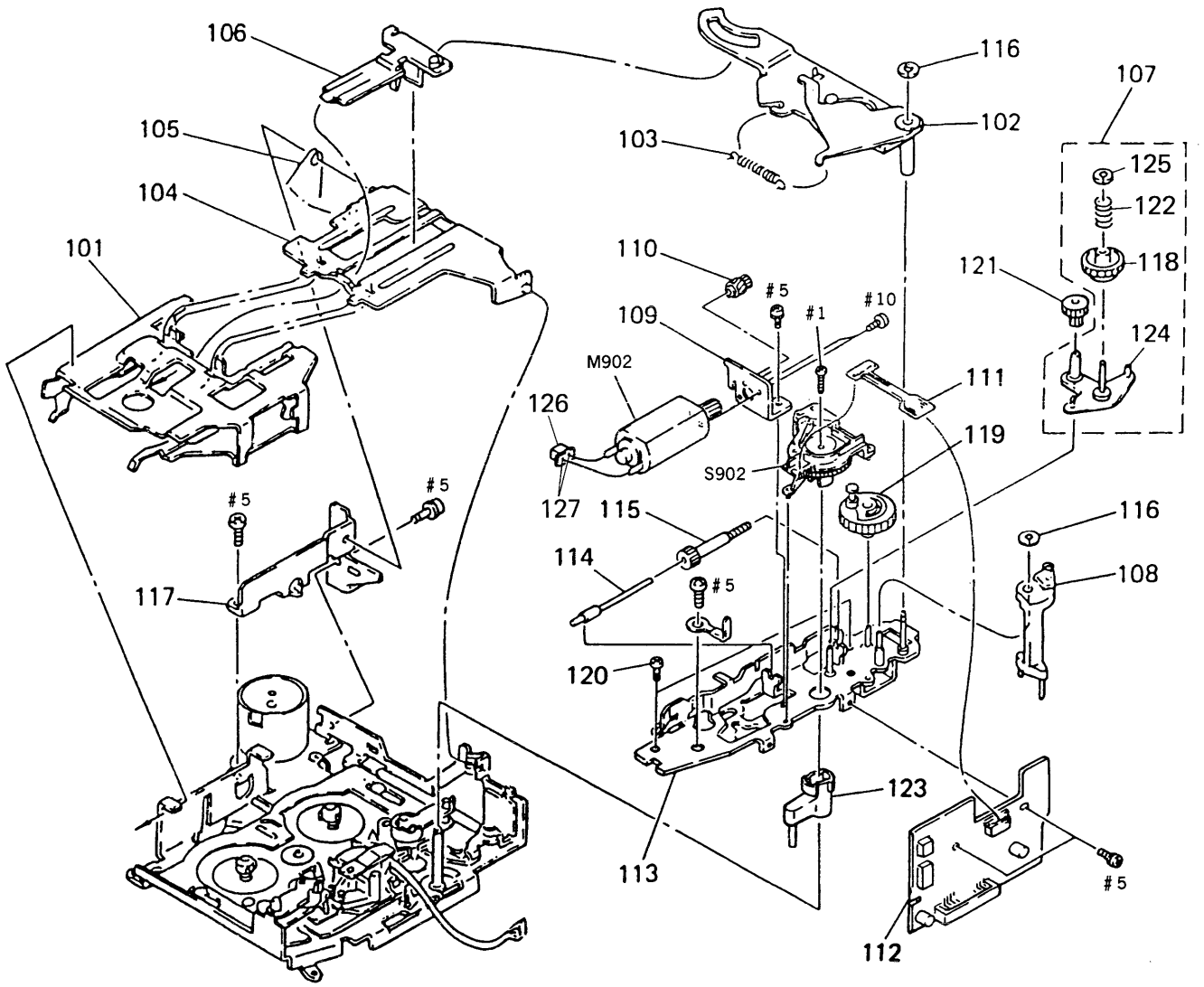
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-389-660-01	BUTTON (SELECT)	
52	3-389-668-01	BUTTON (+ -)	
53	3-904-194-01	EMBLEM (NO. 2.5), SONY	
54	3-389-664-01	BUTTON (V/A)	
55	3-389-666-01	BUTTON (TUNER)	
56	3-904-190-41	PANEL (B), FRONT	
57	3-904-245-01	BUTTON (RELEASE)	
58	3-904-193-01	SPRING (RELEASE)	
59	3-904-243-01	BUTTON (MUTE)	
60	3-904-244-01	BUTTON (DSPL)	
61	3-389-661-01	BUTTON (EJECT B)	
62	3-389-665-01	BUTTON (SEEK)	
63	3-389-671-01	BUTTON (DSP)	
64	3-389-658-01	BUTTON (1-5)	
65	3-389-662-01	BUTTON (6-10)	

Ref. No.	Part No.	Description	Remark
* 66	A-3222-591-A	KEY BOARD, COMPLETE	
67	3-904-191-01	PANEL, FRONT BACK	
* 68	3-389-753-01	REFLECTOR (M), SHEET	
* 69	3-389-673-01	PLATE (M:LCD), LIGHT GUIDE	
* 70	3-389-672-01	HOLDER (M:LCD)	
* 71	3-904-248-01	REFLECTOR (SB), SHEET	
* 72	3-904-247-01	PLATE (SB:LCD), LIGHT GUIDE	
* 73	3-904-246-01	HOLDER (SB:LCD)	
74	3-389-669-01	FILTER (RAY CATCHER)	
75	3-389-674-01	PLATE (B), INDICATION	
76	3-904-632-01	PLATE (C DOOR), LIGHT GUIDE	
77	A-3252-701-A	PANEL ASSY, FRONT	
LCD701	1-810-094-11	DISPLAY PANEL, LIQUID CRYSTAL	
LCD702	1-810-095-11	DISPLAY PANEL, LIQUID CRYSTAL	

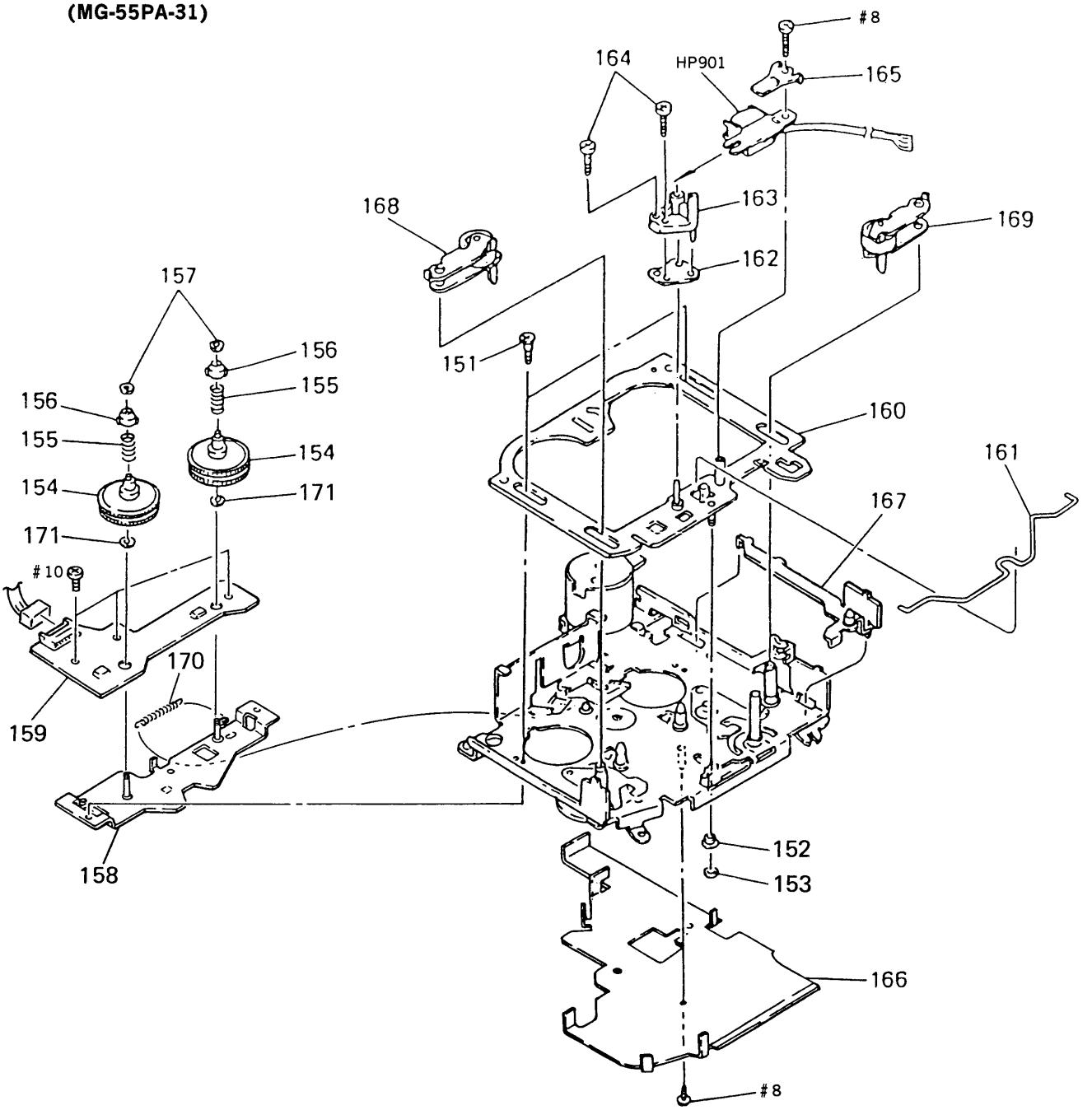
6-3. MECHANISM DECK SECTION 1 (MG-55PA-31)



Ref. No.	Part No.	Description	Remark
* 101	3-344-103-21	HOUSING, CASSETTE	
* 102	X-3344-121-1	ARM ASSY, SUCTION	
103	3-344-216-01	SPRING (SUCTION ARM), TENSION	
* 104	X-3362-262-1	HANGER (F) ASSY, HOUSING	
105	3-344-113-03	SPRING	
* 106	3-344-118-01	CATCHER	
* 107	A-3239-954-A	GEAR ASSY, DRIVING ARM	
* 108	3-375-458-01	ARM (M), REVERSE	
* 109	X-3344-142-2	BRACKET (F) ASSY, MOTOR	
110	3-344-281-01	GEAR (A), DRIVING	
111	1-635-519-12	ROTARY SWITCH FLEXIBLE BOARD	
* 112	A-3295-489-A	EQUALIZER BOARD, COMPLETE	
* 113	X-3362-260-3	CHASSIS (F) ASSY, MCU	
* 114	3-344-157-01	SHAFT, DRIVING GEAR (B)	
115	3-344-156-01	GEAR (B), DRIVING	

Ref. No.	Part No.	Description	Remark
116	3-344-222-01	WASHER	
* 117	3-368-239-13	BRACKET (U), HANGER	
118	3-344-165-02	GEAR (B), FRICTION	
119	X-3344-119-1	GEAR ASSY (L), LDG	
120	3-703-502-21	SCREW	
121	3-344-108-01	GEAR (A), FRICTION	
122	3-344-137-01	SPRING, COMPRESSION	
123	X-3344-117-1	ARM ASSY (L), MODE	
124	X-3344-109-4	ARM ASSY, DRIVING	
125	3-662-058-00	WASHER, SLIT	
* 126	1-565-121-11	HOUSING, CONNECTOR 2P	
* 127	1-565-163-11	TERMINAL, SOLDERLESS	
M902	X-3362-826-1	MOTOR ASSY	
S902	1-572-397-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	

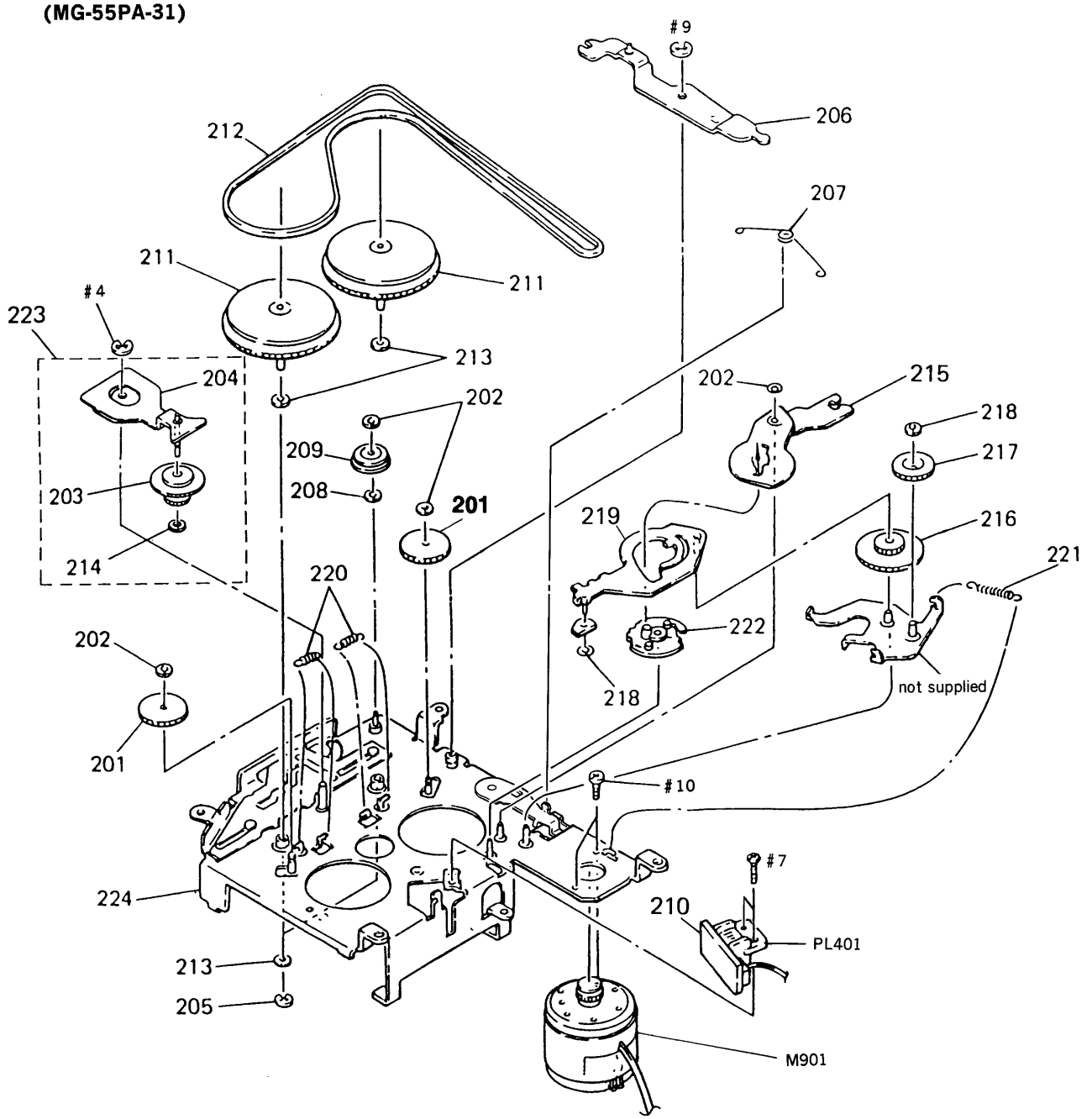
6-4. MECHANISM DECK SECTION 2 (MG-55PA-31)



Ref. No.	Part No.	Description	Remark
151	3-344-110-01	SCREW (HB), STEP	
152	3-344-116-01	ROLLER (A), H/B	
153	3-344-222-01	WASHER	
154	X-3362-214-1	TABLE (F) ASSY, REEL	
155	3-344-143-01	SPRING (BT), COMPRESSION	
156	3-365-725-01	CAP (F), REEL	
157	3-364-151-01	WASHER	
* 158	X-3344-144-2	BRACKET (F) ASSY, REEL TABLE	
* 159	1-648-246-11	REEL BOARD	
* 160	X-3366-042-2	BASE ASSY (F), HEAD	
* 161	3-363-909-01	SPRING (R), PINCH PRESS	

Ref. No.	Part No.	Description	Remark
162	3-344-128-06	SEAM, DAH	
163	3-372-170-01	ARM, DAH	
164	3-364-122-01	SCREW (M1.4X5.5), ADJ	
165	3-344-130-04	RETAINER, HEAD	
* 166	3-344-220-01	COVER, MD	
* 167	3-382-483-01	LEVER (RVS JOINT)	
168	X-3344-115-1	ARM (R) ASSY, PINCH	
169	X-3344-116-1	ARM (F) ASSY, PINCH	
170	3-344-217-01	SPRING (CAM LOCK LEVER), TENTION	
171	3-701-437-01	POLY-SLIDER (A)	
HP901	1-500-043-11	HEAD, MAGNETIC (PLAYBACK)	

6-5. MECHANISM DECK SECTION 3 (MG-55PA-31)



Ref. No.	Part No.	Description	Remark
201	3-376-927-01	GEAR (PLAY)	
202	3-344-222-01	WASHER	
203	X-3344-102-1	GEAR ASSY, FR	
* 204	X-3344-101-6	ARM ASSY, FR	
205	3-364-151-01	WASHER	
* 206	X-3344-139-3	ARM ASSY, POWER	
207	3-344-279-01	SPRING, BUFFER	
208	3-701-436-01	WASHER, 1.6	
209	3-371-971-01	PULLEY (P), MIDWAY	
* 210	1-648-247-11	PLUNGER BOARD	
211	3-386-047-01	FLYWHEEL (D)	
212	3-387-987-01	BELT	
213	3-701-437-01	POLY-SLIDER (A)	

Ref. No.	Part No.	Description	Remark
214	3-344-224-01	WASHER	
* 215	X-3344-114-1	LEVER ASSY, RVS	
216	3-344-146-01	GEAR (B), RVS	
217	3-344-147-01	GEAR (A), RVS	
218	3-344-223-01	WASHER	
219	X-3344-107-1	LEVER ASSY, CAM LOCK	
220	3-344-218-02	SPRING (PLAY ARM), TENSION	
221	3-344-215-01	SPRING, TENSION	
222	3-344-119-01	GEAR, RVS CAM	
223	A-3239-947-A	GEAR SUB ASSY, FR	
* 224	X-3366-043-2	PC BOARD (L) ASSY, MECHANICAL	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
PL401	1-454-461-11	SOLENOID, PLUNGER	

EQUALIZER

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA ..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3295-489-A	EQUALIZER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C302	1-104-527-91	FILM CHIP	100PF	5%	50V
C303	1-104-527-91	FILM CHIP	100PF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-126-189-11	ELECT	0.22uF	20%	50V
C306-308					
	1-104-543-91	FILM CHIP	0.0022uF	5%	50V
C309	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C310	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C311	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-126-187-11	ELECT CHIP	0.1uF	20%	50V
C314	1-128-393-11	ELECT	100uF	20%	10V
C315	1-126-193-11	ELECT	1uF	20%	50V
C316	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C402	1-104-527-91	FILM CHIP	100PF	5%	50V
C403	1-104-527-91	FILM CHIP	100PF	5%	50V
C404	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C405	1-126-189-11	ELECT	0.22uF	20%	50V
C406-408					
	1-104-543-91	FILM CHIP	0.0022uF	5%	50V
C409	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C410	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C415	1-164-361-11	CERAMIC CHIP	0.047uF		16V
		< CONNECTOR >			
CN301	1-569-806-21	CONNECTOR, FPC 5P			
CN302	1-565-770-11	CONNECTOR, FPC (1.0MM) (ZIF) 6P			
* CN303	1-691-741-21	PIN, CONNECTOR (PC BOARD) 2P			
* CN401	1-750-217-21	CONNECTOR (WAFER) 18P			
		< DIODE >			
D301	8-719-404-35	DIODE MA141WK			
D302	8-719-404-35	DIODE MA141WK			
D303	8-719-404-35	DIODE MA141WK			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC401	8-759-160-99	IC HA12174			
		< RESISTOR >			
R301	1-208-528-61	METAL GLAZE	56K	5%	1/10W
R302	1-208-528-61	METAL GLAZE	56K	5%	1/10W
R303	1-208-464-61	METAL GLAZE	12K	5%	1/10W
R304	1-208-468-61	METAL GLAZE	18K	5%	1/10W
R305	1-208-546-61	METAL GLAZE	330K	5%	1/10W
R306	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R307	1-218-313-11	METAL CHIP	560	0.50%	1/16W
R308	1-216-839-11	METAL CHIP	33K	5%	1/16W
R309	1-216-836-11	METAL CHIP	18K	5%	1/16W
R310	1-216-845-11	METAL CHIP	100K	5%	1/16W
R311	1-216-851-11	METAL CHIP	330K	5%	1/16W
R312	1-216-853-11	METAL CHIP	470K	5%	1/16W
R313	1-216-841-11	METAL CHIP	47K	5%	1/16W
R314	1-216-836-11	METAL CHIP	18K	5%	1/16W
R315	1-216-833-11	METAL CHIP	10K	5%	1/16W
R401	1-208-528-61	METAL GLAZE	56K	5%	1/10W
R402	1-208-528-61	METAL GLAZE	56K	5%	1/10W
R403	1-208-464-61	METAL GLAZE	12K	5%	1/10W
R404	1-208-468-61	METAL GLAZE	18K	5%	1/10W
R405	1-208-546-61	METAL GLAZE	330K	5%	1/10W
R406	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R407	1-218-313-11	METAL CHIP	560	0.50%	1/16W
		< VARIABLE RESISTOR >			
RV301	1-241-552-11	RES, ADJ CERMET 470			
RV401	1-241-552-11	RES, ADJ CERMET 470			
		< SWITCH >			
S301	1-570-953-11	SWITCH, PUSH (1 KEY) (DETECT)			
S302	1-570-953-11	SWITCH, PUSH (1 KEY) (FWD/REV)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-3295-564-A	I/O BOARD, COMPLETE			
		**********			
	1-533-179-21	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-104-889-91	ELECT	2200uF	20%	16V
C903	1-104-646-91	CERAMIC	2.2uF	20%	50V
C904	1-136-155-00	FILM	0.015uF	5%	50V
C905	1-162-282-31	CERAMIC CHIP	100PF	10%	50V
C915	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C925	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C931	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C941	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C942	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN900	1-695-244-21	PLUG, CONNECTOR 15P			
CN901	1-695-201-21	PLUG, CONNECTOR 15P			
* CN902	1-580-914-11	PLUG, CONNECTOR 12P			
		< DIODE >			
D901	8-719-041-36	DIODE	NSD03A40-TE16L		
D931	8-719-034-46	DIODE	MA4062-M		
		< JACK >			
J905	1-691-683-11	JACK, PIN 4P (UNLINK IN AUDIO/ LINE OUT REAR)			
J906	1-691-683-11	JACK, PIN 4P (LINE OUT REAR/SUB OUT)			
		< COIL >			
L901	1-406-723-11	COIL, CHOKE (TROIDAL)			
		< RESISTOR >			
R915	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R916	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R925	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R926	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R931	1-216-049-00	METAL CHIP	1K	5%	1/10W
R941	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R942	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W

****

Ref. No.	Part No.	Description			Remark
*	A-3222-591-A	KEY BOARD, COMPLETE			
		**********			
*	3-389-672-01	HOLDER (M:LCD)			
*	3-389-673-01	PLATE (M:LCD), LIGHT GUIDE			
*	3-389-753-01	REFLECTOR (M), SHEET			
*	3-904-246-01	HOLDER (SB:LCD)			
*	3-904-247-01	PLATE (SB:LCD), LIGHT GUIDE			
*	3-904-248-01	REFLECTOR (SB), SHEET			
		< CAPACITOR >			
C701	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C702	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C703	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
* CNP701	1-691-557-21	PIN, CONNECTOR 12P			
		< DIODE >			
D701	8-719-987-45	LED	CL-155Y/PG-CD (TAPE◁▯▷)		
D702	8-719-987-45	LED	CL-155Y/PG-CD (⏏)		
D703	8-719-987-45	LED	CL-155Y/PG-CD (CD)		
D704	8-719-987-45	LED	CL-155Y/PG-CD (VISUAL)		
D705	8-719-987-45	LED	CL-155Y/PG-CD (TUNER)		
D706	8-719-987-45	LED	CL-155Y/PG-CD (LOUD)		
D707	8-719-987-45	LED	CL-155Y/PG-CD (FILE)		
D708	8-719-987-45	LED	CL-155Y/PG-CD (SENS)		
D709	8-719-987-45	LED	CL-155Y/PG-CD (10)		
D710	8-719-987-45	LED	CL-155Y/PG-CD (9)		
D711	8-719-987-45	LED	CL-155Y/PG-CD (MTL/8)		
D713	8-719-987-45	LED	CL-155Y/PG-CD (ATA/5)		
D714	8-719-987-45	LED	CL-155Y/PG-CD (BANK/4)		
D715	8-719-987-45	LED	CL-155Y/PG-CD (SHUF/3)		
D716	8-719-987-45	LED	CL-155Y/PG-CD (REPEAT/2)		
D717	8-719-987-45	LED	CL-155Y/PG-CD (MUTE)		
D718	8-719-987-45	LED	CL-155Y/PG-CD (+)		
D719	8-719-987-45	LED	CL-155Y/PG-CD (SEL)		
D720	8-719-987-45	LED	CL-155Y/PG-CD (▯▯/7)		
D722	8-719-987-45	LED	CL-155Y/PG-CD (-)		
D723	8-719-987-45	LED	CL-155Y/PG-CD (BL.SKIP/6)		
D724	8-719-987-45	LED	CL-155Y/PG-CD (INTRO/1)		
D725	8-719-404-49	DIODE	MA111		
D726	8-719-422-43	DIODE	MA8051-H		
D727	8-719-422-43	DIODE	MA8051-H		
D728	8-719-404-49	DIODE	MA111		
D729	8-719-404-49	DIODE	MA111		

KEY

Ref. No.	Part No.	Description			Remark
		< FUSE >			
F900	1-533-328-11	FUSE (BLADE TYPE) (AUTO FUSE) (5A)			
		< IC >			
IC701	8-759-246-16	IC TC9240F			
IC702	8-759-515-60	IC RS-20			
		< LIQUID CRYSTAL DISPLAY >			
LCD701	1-810-094-11	DISPLAY PANEL, LIQUID CRYSTAL			
LCD702	1-810-095-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL701	1-517-181-11	LAMP, PILOT			
PL702	1-517-181-11	LAMP, PILOT			
PL703	1-517-181-21	LAMP, PILOT			
PL704	1-517-181-21	LAMP, PILOT			
PL705	1-517-181-11	LAMP, PILOT			
PL706	1-517-181-21	LAMP, PILOT			
		< TRANSISTOR >			
Q701-704					
	8-729-904-66	TRANSISTOR DTD113EK			
		< RESISTOR >			
R701	1-216-049-00	METAL CHIP	1K	5%	1/10W
R703	1-216-039-00	METAL CHIP	390	5%	1/10W
R704	1-216-033-00	METAL CHIP	220	5%	1/10W
R705	1-216-033-00	METAL CHIP	220	5%	1/10W
R706	1-216-035-00	METAL CHIP	270	5%	1/10W
R707	1-216-033-00	METAL CHIP	220	5%	1/10W
R708	1-216-023-00	METAL CHIP	82	5%	1/10W
R709	1-216-023-00	METAL CHIP	82	5%	1/10W
R710	1-216-033-00	METAL CHIP	220	5%	1/10W
R714	1-216-041-00	METAL CHIP	470	5%	1/10W
R715	1-216-041-00	METAL CHIP	470	5%	1/10W
R716-718					
	1-216-049-00	METAL CHIP	1K	5%	1/10W
R719	1-216-097-00	METAL CHIP	100K	5%	1/10W
R720	1-216-089-00	METAL CHIP	47K	5%	1/10W
R721-723					
	1-216-049-00	METAL CHIP	1K	5%	1/10W
R724	1-216-025-00	METAL CHIP	100	5%	1/10W
R730	1-216-039-00	METAL CHIP	390	5%	1/10W
R731	1-216-035-00	METAL CHIP	270	5%	1/10W
R732	1-216-035-00	METAL CHIP	270	5%	1/10W
R733	1-216-027-00	METAL CHIP	120	5%	1/10W
R734	1-216-027-00	METAL CHIP	120	5%	1/10W

Ref. No.	Part No.	Description			Remark
R735	1-216-035-00	METAL CHIP	270	5%	1/10W
R751	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R752	1-216-820-11	METAL CHIP	820	5%	1/16W
R753	1-216-820-11	METAL CHIP	820	5%	1/16W
R754	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R755	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R756	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R757	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R758	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W
R759	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W
R760	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R761	1-216-669-11	METAL CHIP	5.6K	0.5%	1/10W
R762	1-216-673-11	METAL CHIP	8.2K	0.5%	1/10W
R763	1-216-679-11	METAL CHIP	15K	0.5%	1/10W
R771	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R772	1-216-820-11	METAL CHIP	820	5%	1/16W
R773	1-216-820-11	METAL CHIP	820	5%	1/16W
R774	1-216-821-11	METAL CHIP	1K	5%	1/16W
R775	1-216-821-11	METAL CHIP	1K	5%	1/16W
R776	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R777	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R778	1-216-660-11	METAL CHIP	2.4K	0.5%	1/10W
R779	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W
R780	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W
R781	1-216-669-11	METAL CHIP	5.6K	0.5%	1/10W
		< SWITCH >			
S701	1-692-037-31	SWITCH, KEY BOARD (⏏)			
S702	1-692-037-31	SWITCH, KEY BOARD (TAPE ◁▯▷)			
S703	1-692-037-31	SWITCH, KEY BOARD (LOUD)			
S704	1-692-037-31	SWITCH, KEY BOARD (DSPL)			
S705	1-692-037-31	SWITCH, KEY BOARD (10)			
S706	1-692-037-31	SWITCH, KEY BOARD (ATA/5)			
S707	1-692-037-31	SWITCH, KEY BOARD (9)			
S708	1-692-037-31	SWITCH, KEY BOARD (BANK/4)			
S709	1-692-037-31	SWITCH, KEY BOARD (SHUF/3)			
S710	1-692-037-31	SWITCH, KEY BOARD (MTL/8)			
S711	1-692-037-31	SWITCH, KEY BOARD (REPEAT/2)			
S712	1-692-037-31	SWITCH, KEY BOARD (▯▯/7)			
S713	1-692-037-31	SWITCH, KEY BOARD (INTRO/1)			
S714	1-692-037-31	SWITCH, KEY BOARD (BL. SKIP/6)			
S715	1-692-037-31	SWITCH, KEY BOARD (OFF)			
S716	1-692-037-31	SWITCH, KEY BOARD (TUNER)			
S717	1-692-037-31	SWITCH, KEY BOARD (VISUAL)			
S718	1-692-037-31	SWITCH, KEY BOARD (CD)			
S719	1-692-037-31	SWITCH, KEY BOARD (SENS)			
S720	1-692-037-31	SWITCH, KEY BOARD (FILE)			
S721	1-692-037-31	SWITCH, KEY BOARD (+ ▷▷| (AMS/SEEK))			
S722	1-692-037-31	SWITCH, KEY BOARD (|◁◁ - (AMS/SEEK))			

Ref. No.	Part No.	Description			Remark
S723	1-692-037-31	SWITCH, KEY BOARD (+)			
S724	1-692-037-31	SWITCH, KEY BOARD (SEL)			
S725	1-692-037-31	SWITCH, KEY BOARD (-)			
S726	1-692-037-31	SWITCH, KEY BOARD (MUTE)			
**********					
*	A-3295-562-A	MAIN BOARD, COMPLETE			
		**********			
		< BUZZER >			
BZ601	1-529-108-21	BUZZER, PIEZOELECTRIC			
		< CAPACITOR >			
C1	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C2	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C5	1-130-475-00	MYLAR	0.0022uF	5%	50V
C6	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C7	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C8	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C9	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C10	1-126-157-11	ELECT	10uF	20%	16V
C11	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C12	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C13	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C14	1-126-157-11	ELECT	10uF	20%	16V
C15	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C16	1-126-157-11	ELECT	10uF	20%	16V
C17	1-124-994-11	ELECT	100uF	20%	10V
C18	1-124-584-00	ELECT	100uF	20%	10V
C19	1-124-994-11	ELECT	100uF	20%	10V
C20	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C21	1-124-584-00	ELECT	100uF	20%	10V
C26	1-136-169-00	FILM	0.22uF	5%	50V
C27	1-130-479-00	MYLAR	0.0047uF	5%	50V
C28	1-126-157-11	ELECT	10uF	20%	16V
C29	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C30	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C31	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C32-35					
	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C79	1-136-158-00	FILM	0.027uF	5%	50V
C80	1-136-158-00	FILM	0.027uF	5%	50V
C81	1-104-947-61	ELECT	4.7uF	20%	35V
C82	1-104-947-61	ELECT	4.7uF	20%	35V
C85	1-104-943-61	ELECT	2.2uF	20%	50V
C87	1-136-161-00	FILM	0.047uF	5%	50V

Ref. No.	Part No.	Description			Remark
C88	1-162-970-91	CERAMIC CHIP	0.01uF	10%	25V
C101	1-104-943-61	ELECT	2.2uF	20%	50V
C102	1-104-943-61	ELECT	2.2uF	20%	50V
C104	1-136-155-00	FILM	0.015uF	5%	50V
C106	1-104-943-61	ELECT	2.2uF	20%	50V
C107	1-104-943-61	ELECT	2.2uF	20%	50V
C111	1-136-164-00	FILM	0.082uF	5%	50V
C112	1-130-475-00	MYLAR	0.0022uF	5%	50V
C113	1-104-948-61	ELECT	10uF	20%	35V
C114	1-130-478-00	MYLAR	0.0039uF	5%	50V
C115	1-104-948-61	ELECT	10uF	20%	35V
C116	1-136-169-00	FILM	0.22uF	5%	50V
C118-120					
	1-104-948-61	ELECT	10uF	20%	35V
C121	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C122	1-128-241-11	ELECT	220uF	20%	10V
C151	1-104-948-61	ELECT	10uF	20%	35V
C153	1-104-948-61	ELECT	10uF	20%	35V
C155	1-104-948-61	ELECT	10uF	20%	35V
C201	1-104-943-61	ELECT	2.2uF	20%	50V
C202	1-104-943-61	ELECT	2.2uF	20%	50V
C204	1-136-155-00	FILM	0.015uF	5%	50V
C206	1-104-943-61	ELECT	2.2uF	20%	50V
C207	1-104-943-61	ELECT	2.2uF	20%	50V
C211	1-136-164-00	FILM	0.082uF	5%	50V
C212	1-130-475-00	MYLAR	0.0022uF	5%	50V
C213	1-104-948-61	ELECT	10uF	20%	35V
C214	1-130-478-00	MYLAR	0.0039uF	5%	50V
C215	1-104-948-61	ELECT	10uF	20%	35V
C216	1-136-169-00	FILM	0.22uF	5%	50V
C218-220					
	1-104-948-61	ELECT	10uF	20%	35V
C221	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C222	1-128-241-11	ELECT	220uF	20%	10V
C251	1-104-948-61	ELECT	10uF	20%	35V
C253	1-104-948-61	ELECT	10uF	20%	35V
C255	1-104-948-61	ELECT	10uF	20%	35V
C300	1-104-955-61	ELECT	100uF	20%	10V
C301	1-104-955-61	ELECT	100uF	20%	10V
C302	1-104-949-61	ELECT	22uF	20%	35V
C303	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-104-559-11	FILM CHIP	0.047uF	5%	16V
C306	1-124-589-11	ELECT	47uF	20%	16V
C307	1-104-943-61	ELECT	2.2uF	20%	50V
C401	1-126-157-11	ELECT	10uF	20%	16V
C402	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C404	1-126-103-11	ELECT	1000uF	20%	16V
C501	1-164-222-11	CERAMIC CHIP	0.22uF		25V

MAIN

Ref. No.	Part No.	Description			Remark
C502	1-126-157-11	ELECT	10uF	20%	16V
C503	1-126-157-11	ELECT	10uF	20%	16V
C505	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C506	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C507	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C510	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C511	1-126-157-11	ELECT	10uF	20%	16V
C512-514					
	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C515	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C516	1-126-157-11	ELECT	10uF	20%	16V
C517	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C550	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C574	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C575	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C578	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C579	1-126-924-11	ELECT	330uF	20%	10V
C580	1-125-705-11	CAP, DOUBLE LAYERS		0.22F	
C581	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C600	1-124-248-00	ELECT	22uF	20%	35V
C601	1-124-248-00	ELECT	22uF	20%	35V
C602	1-135-138-11	TANTAL. CHIP	10uF	20%	25V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-124-589-11	ELECT	47uF	20%	16V
C607	1-124-584-00	ELECT	100uF	20%	10V
C651	1-104-947-61	ELECT	4.7uF	20%	35V
		< CONNECTOR >			
* CN301	1-695-202-21	SOCKET, CONNECTOR 15P			
CN302	1-580-916-11	SOCKET, CONNECTOR 12P			
* CN401	1-750-218-21	CONNECTOR (HOUSING) 18P			
CN402	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P			
CN551	1-580-907-11	PLUG, CONNECTOR (UNLINK IN CONTROL)			
CN571	1-750-621-11	PLUG, CONNECTOR (14P-L)			
		< TRIMMER >			
CT501	1-141-276-00	CAP, TRIMMER			
		< DIODE >			
D1	8-719-038-32	DIODE	1SS314-TPH3		
D2	8-719-038-32	DIODE	1SS314-TPH3		
D3	8-719-034-59	DIODE	MA4082-H		
D4	8-719-034-22	DIODE	MA4039-M		
D6	8-719-040-04	DIODE	MA721WK		
D301	8-719-404-49	DIODE	MA111		
D302	8-719-404-49	DIODE	MA111		
D303	8-719-034-22	DIODE	MA4039-M		
D401	8-719-027-50	DIODE	MA142WK		
D402	8-719-034-63	DIODE	MA4091-H		

Ref. No.	Part No.	Description		Remark
D403	8-719-404-49	DIODE	MA111	
D404	8-719-404-49	DIODE	MA111	
D405	8-719-404-49	DIODE	MA111	
D501	8-719-027-48	DIODE	MA142WA	
D502	8-719-404-49	DIODE	MA111	
D503	8-719-027-48	DIODE	MA142WA	
D505	8-719-404-49	DIODE	MA111	
D551	8-719-034-49	DIODE	MA4068-L	
D552	8-719-034-46	DIODE	MA4062-M	
D553	8-719-034-46	DIODE	MA4062-M	
D554	8-719-404-49	DIODE	MA111	
D555	8-719-404-49	DIODE	MA111	
D556	8-719-034-46	DIODE	MA4062-M	
D571	8-719-034-46	DIODE	MA4062-M	
D572	8-719-034-46	DIODE	MA4062-M	
D573	8-719-034-46	DIODE	MA4062-M	
D574	8-719-034-46	DIODE	MA4062-M	
D575	8-719-034-46	DIODE	MA4062-M	
D576	8-719-034-46	DIODE	MA4062-M	
D577	8-719-034-46	DIODE	MA4062-M	
D578	8-719-034-46	DIODE	MA4062-M	
D580	8-719-034-70	DIODE	MA4110-M	
D582	8-719-027-48	DIODE	MA142WA	
D583	8-719-040-04	DIODE	MA721WK	
D584	8-719-404-49	DIODE	MA111	
D601	8-719-034-41	DIODE	MA4056-L	
D602	8-719-034-96	DIODE	MA4200	
D650	8-719-034-96	DIODE	MA4200	
D651	8-719-027-50	DIODE	MA142WK	
D653	8-719-034-54	DIODE	MA4075-M	
		< IC >		
IC1	8-759-069-48	IC	LA1061M	
IC2	8-759-823-81	IC	LC7216M	
IC101	8-759-982-04	IC	RC5532M	
IC102	8-759-711-82	IC	NJM4580E	
IC201	8-759-982-04	IC	RC5532M	
IC202	8-759-711-82	IC	NJM4580E	
IC301	8-752-063-44	IC	CXA1646Q	
IC302	8-759-982-04	IC	RC5532M	
IC303	8-759-711-82	IC	NJM4580E	
IC304	8-759-165-34	IC	TC9212F	
IC401	8-759-823-87	IC	LB1638M	
IC501	8-759-189-20	IC	uPD75518GF-131-3B9	
IC502	8-759-166-74	IC	uPD75116GF-G50-3BE	
IC503	8-759-165-36	IC	X24C04S8IC7000	
IC571	8-759-167-83	IC	PST600EMT	
IC601	8-759-182-75	IC	BA3910B-V2	

Ref. No.	Part No.	Description			Remark
		< JACK >			
J1	1-750-617-11	JACK (ANTENNA)			
J501	1-566-822-11	JACK (REMOTE IN)			
		< JUMPER RESISTOR >			
JR500	1-216-864-11	METAL CHIP	0	5% 1/16W	
JR578	1-216-295-00	METAL CHIP	0	5% 1/10W	
JR579	1-216-295-00	METAL CHIP	0	5% 1/10W	
		< COIL >			
L1	1-412-003-41	INDUCTOR CHIP	5.6uH		
L2	1-410-216-31	INDUCTOR CHIP	100uH		
L3	1-410-204-31	INDUCTOR CHIP	10uH		
L501	1-410-204-31	INDUCTOR CHIP	10uH		
L502	1-410-204-31	INDUCTOR CHIP	10uH		
		< TRANSISTOR >			
Q2	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q3	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q4	8-729-230-60	TRANSISTOR	2SA1586-YG		
Q5	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q6	8-729-021-94	TRANSISTOR	2SK1657-B		
Q8-10					
	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q11	8-729-015-74	TRANSISTOR	UN5111-TX		
Q12	8-729-231-75	TRANSISTOR	2SC4116GL-TE85L		
Q101	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q102	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q151	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q201	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q202	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q251	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q301	8-729-424-52	TRANSISTOR	UN211F-TX		
Q302	8-729-021-93	TRANSISTOR	UPA502T		
Q401	8-729-807-12	TRANSISTOR	2SC3073-Y		
Q401	8-729-821-35	TRANSISTOR	2SD1802FAU-TL		
Q402	8-729-015-74	TRANSISTOR	UN5111-TX		
Q403	8-729-106-60	TRANSISTOR	2SB1115A		
Q404	8-729-015-76	TRANSISTOR	UN5211-TX		
Q405	8-729-902-XX	TRANSISTOR	UN2215-QRS		
Q406	8-729-015-76	TRANSISTOR	UN5211-TX		
Q501	8-729-015-76	TRANSISTOR	UN5211-TX		
Q502	8-729-015-74	TRANSISTOR	UN5111-TX		
Q551	8-729-403-35	TRANSISTOR	UN5113		
Q552	8-729-231-75	TRANSISTOR	2SC4116GL-TE85L		
Q553	8-729-015-74	TRANSISTOR	UN5111-TX		
Q570	8-729-015-76	TRANSISTOR	UN5211-TX		
Q571	8-729-015-74	TRANSISTOR	UN5111-TX		
Q572-575					
	8-729-821-35	TRANSISTOR	2SD1802FAU-TL		
Q576	8-729-015-76	TRANSISTOR	UN5211-TX		
Q577	8-729-106-60	TRANSISTOR	2SB1115A		
Q578	8-729-920-56	TRANSISTOR	FMG1		
Q579	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q601	8-729-821-35	TRANSISTOR	2SD1802FAU-TL		
Q602	8-729-421-22	TRANSISTOR	UN2211		
Q650	8-729-015-76	TRANSISTOR	UN5211-TX		
Q651	8-729-231-75	TRANSISTOR	2SC4116GL-TE85L		
		< RESISTOR >			
R1	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	
R2	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	
R4	1-216-840-11	METAL CHIP	39K	5% 1/16W	
R5	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R6	1-216-857-11	METAL CHIP	1M	5% 1/16W	
R7	1-216-837-11	METAL CHIP	22K	5% 1/16W	
R8	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R9	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R10	1-216-842-11	METAL CHIP	56K	5% 1/16W	
R11	1-216-845-11	METAL CHIP	100K	5% 1/16W	
R12	1-218-293-11	METAL GLAZE	24K	5% 1/16W	
R13	1-216-845-11	METAL CHIP	100K	5% 1/16W	
R14	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R15	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R16	1-216-845-11	METAL CHIP	100K	5% 1/16W	
R17	1-216-845-11	METAL CHIP	100K	5% 1/16W	
R18	1-216-821-11	METAL CHIP	1K	5% 1/16W	
R21	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R22	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R23	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R24	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R25	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R27	1-216-827-11	METAL CHIP	3.3K	5% 1/16W	
R29	1-216-827-11	METAL CHIP	3.3K	5% 1/16W	
R30	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R31	1-216-827-11	METAL CHIP	3.3K	5% 1/16W	
R32	1-216-833-11	METAL CHIP	10K	5% 1/16W	
R33	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R81	1-208-458-41	METAL GLAZE	6.8K	2% 1/10W	
R82	1-208-458-41	METAL GLAZE	6.8K	2% 1/10W	
R83	1-208-456-41	METAL GLAZE	5.6K	2% 1/10W	
R85	1-208-458-41	METAL GLAZE	6.8K	2% 1/10W	
R87	1-208-464-41	METAL GLAZE	12K	2% 1/10W	
R88	1-208-464-41	METAL GLAZE	12K	2% 1/10W	
R101	1-208-534-41	METAL GLAZE	100K	2% 1/10W	
R110	1-208-502-41	METAL GLAZE	4.7K	2% 1/8W	
R111	1-208-502-41	METAL GLAZE	4.7K	2% 1/8W	

MAIN

Ref. No.	Part No.	Description			Remark
R121	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R122	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R123	1-208-470-41	METAL GLAZE	220	2%	1/8W
R124	1-208-470-41	METAL GLAZE	220	2%	1/8W
R125	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R126	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R127	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R128	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R151	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R152	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R153	1-208-470-41	METAL GLAZE	220	2%	1/8W
R154	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R201	1-208-534-41	METAL GLAZE	100K	2%	1/10W
R210	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R211	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R221	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R222	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R223	1-208-470-41	METAL GLAZE	220	2%	1/8W
R224	1-208-470-41	METAL GLAZE	220	2%	1/8W
R225	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R226	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R227	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R228	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R251	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R252	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R253	1-208-470-41	METAL GLAZE	220	2%	1/8W
R254	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R301	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R302	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R306	1-216-017-00	METAL CHIP	47	5%	1/10W
R401	1-216-821-11	METAL CHIP	1K	5%	1/16W
R402	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
R403	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R404	1-216-833-11	METAL CHIP	10K	5%	1/16W
R405	1-208-474-41	METAL GLAZE	330	2%	1/8W
R406	1-208-474-41	METAL GLAZE	330	2%	1/8W
R502	1-216-845-11	METAL CHIP	100K	5%	1/16W
R507	1-216-837-11	METAL CHIP	22K	5%	1/16W
R510	1-216-821-11	METAL CHIP	1K	5%	1/16W
R521	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R522	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R523	1-216-025-00	METAL CHIP	100	5%	1/10W
R524	1-216-025-00	METAL CHIP	100	5%	1/10W
R530	1-216-864-11	METAL CHIP	0	5%	1/16W
R532-534	1-216-837-11	METAL CHIP	22K	5%	1/16W
R538	1-216-841-11	METAL CHIP	47K	5%	1/16W
R540	1-216-049-00	METAL CHIP	1K	5%	1/10W
R541	1-216-841-11	METAL CHIP	47K	5%	1/16W
R542	1-216-089-00	METAL CHIP	47K	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/16W
R544	1-216-845-11	METAL CHIP	100K	5%	1/16W
R546	1-216-073-00	METAL CHIP	10K	5%	1/10W
R550	1-216-017-00	METAL CHIP	47	5%	1/10W
R551	1-216-025-00	METAL CHIP	100	5%	1/10W
R552	1-216-025-00	METAL CHIP	100	5%	1/10W
R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R554	1-216-089-00	METAL CHIP	47K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/16W
R556	1-216-845-11	METAL CHIP	100K	5%	1/16W
R572	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R573	1-216-025-00	METAL CHIP	100	5%	1/10W
R575	1-216-025-00	METAL CHIP	100	5%	1/10W
R576	1-216-025-00	METAL CHIP	100	5%	1/10W
R579	1-208-474-41	METAL GLAZE	330	2%	1/8W
R582-585	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R586	1-208-488-41	METAL GLAZE	1.2K	2%	1/8W
R587	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R588	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R589	1-216-839-11	METAL CHIP	33K	5%	1/16W
R590	1-216-845-11	METAL CHIP	100K	5%	1/16W
R591	1-216-833-11	METAL CHIP	10K	5%	1/16W
R592	1-216-845-11	METAL CHIP	100K	5%	1/16W
R601	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R602	1-216-049-00	METAL CHIP	1K	5%	1/10W
R603	1-216-037-00	METAL CHIP	330	5%	1/10W
R650	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R653	1-216-841-11	METAL CHIP	47K	5%	1/16W
R654	1-216-841-11	METAL CHIP	47K	5%	1/16W
R655	1-216-838-11	METAL CHIP	27K	5%	1/16W
R656	1-216-845-11	METAL CHIP	100K	5%	1/16W

< RESISTOR NETWORK >

RB501	1-239-426-91	NETWORK, RESISTOR (CHIP TYPE)
RB503	1-239-426-91	NETWORK, RESISTOR (CHIP TYPE)
RB504	1-239-426-91	NETWORK, RESISTOR (CHIP TYPE)
RB505-507	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE)

< SWITCH >

S1	1-572-272-11	SWITCH, SLIDE (FM DIVERSITY)
S501	1-572-272-11	SWITCH, SLIDE (POWER SELECT)
S510	1-572-288-11	SWITCH, PUSH (NOSE)

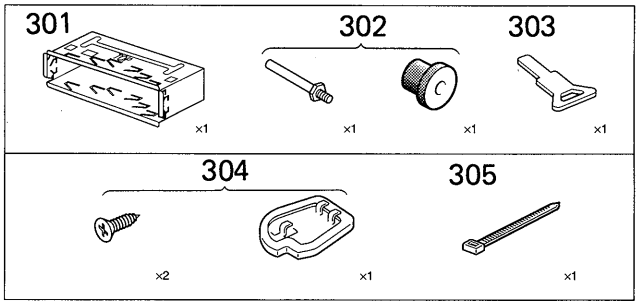
< TUNER >

* TU1	A-3295-309-A	TUNER UNIT (TUX-001)

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)	
X501	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)	
X502	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)	
**********			
*	1-648-247-11	PLUNGER BOARD	
		**********	
		< PLUNGER >	
PL401	1-454-461-11	SOLENOID, PLUNGER	
**********			
*	1-648-246-11	REEL BOARD	
		*********	
		< CONNECTOR >	
CN201	1-691-742-11	PIN, CONNECTOR (PC BOARD) 4P	
		< PHOTO INTERRUPTER >	
PH201	8-719-988-14	PHOTO INTERRUPTER PR-11-B	
PH202	8-719-988-14	PHOTO INTERRUPTER PR-11-B	
		< TRANSISTOR >	
Q201	8-729-403-07	TRANSISTOR XN1213	
		< RESISTOR >	
R201	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R202	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R203	1-216-190-00	METAL GLAZE 470 5% 1/8W	
**********			
*	1-648-719-11	RESET BOARD	
		**********	
		< CONNECTOR >	
CN572	1-750-622-11	SOCKET, CONNECTOR 14P	
* CN573	1-691-558-11	SOCKET, CONNECTOR 12P	
		< DIODE >	
D570	8-719-422-64	DIODE MA8062-M	
		< RESISTOR >	
R570	1-216-049-00	METAL CHIP 1K 5% 1/10W	
		< SWITCH >	
S571	1-570-909-21	SWITCH, TACTIL (REFLOW TYPE) (RESET)	
**********			

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
111	1-635-519-12	ROTARY SWITCH FLEXIBLE BOARD	
* 126	1-565-121-11	HOUSING, CONNECTOR 2P	
* 127	1-565-163-11	TERMINAL, SOLDERLESS	
F900	1-533-328-11	FUSE (BLADE TYPE) (AUTO FUSE) (5A)	
F901	1-533-326-11	FUSE (BLADE TYPE) (AUTO FUSE) (3A)	
HP901	1-500-043-11	HEAD, MAGNETIC (PLAYBACK)	
M901	X-3344-136-3	MOTOR SUB ASSY, CAPSTAN	
M902	X-3362-826-1	MOTOR ASSY	
S902	1-572-397-11	SWITCH, ROTARY SLIDE (TAPE OPERATION)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	X-3366-865-1	CASE ASSY	
	1-467-165-21	REMOTE COMMANDER (RM-X33)	
	3-756-918-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH)	
	3-756-921-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH)	
*	3-904-875-01	INDIVIDUAL CARTON	
*	3-904-877-01	CUSHION (UPPER)	
*	3-904-878-01	CUSHION (LOWER)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-255-65	SCREW +P 2X10	
#2	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#3	7-621-770-67	SCREW (+PTT 2.6X8), GROUND POINT	
#4	7-624-102-04	STOP RING 1.5, TYPE -E	
#5	7-628-253-05	SCREW +PS 2X4	
#6	7-621-770-XX	SCREW +PTT 2.6X8 (S)	
#7	7-627-850-67	SCREW, PRECISION +P 1.4X4	
#8	7-627-850-18	SCREW, PRECISION +P 1.4X2.5	
#9	7-624-104-04	STOP RING 2.0, TYPE -E	
#10	7-627-554-07	SCREW, PRECISION +P 2X2.2	
#11	7-621-772-10	SCREW +B 2X4	
#12	7-621-775-40	SCREW +PTT 2.6X8 (S)	
#13	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	
**********			

MOUNTING HARDWARE



Ref. No.	Part No.	Description	Remark
* 301	X-3366-235-1	FRAME ASSY, FITTING	
302	X-3366-405-1	SCREW ASSY (EXP), FITTING	
303	3-388-078-01	KEY	
304	X-3366-925-1	BACKET ASSY	
305	3-655-653-21	BAND (TAITON), BINDING	

9-957-919-11

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Mobile Electronics Group

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XR-U800

SONY®
SERVICE MANUAL

US Model
Canadian Model

SUPPLEMENT-1

File this Supplement with the Service Manual.

Subject :

1. **Correction**
2. **Change the Mechanical Parts**
3. **Change the Printed Circuit Boards**

1. CORRECTION

☛ : **corrected portion.**

Page 1.

- Refer to another service manual RM-X32/X33 for XR-U800 supplied remote commander. ☚

Page28.

27	LM-EJECT	EJECT	O	Control output at LOADING MOTOR. EJECT : H ☚
28	LM-LOAD	LOAD	O	Control output at LOADING MOTOR. LOAD : H ☚

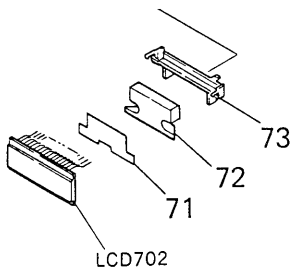
37	$\overline{\text{AMS IN}}$	$\overline{\text{AMS-IN}}$	I	AMS signal input. L : Tape sound is present ☚. H : Tape sound is not present ☚

Page 29.

66	—	$\overline{\text{TEL. MUTE}}$	—	Telephone call detection pin. H : Mute −20dB audio signal ☚
67	—	CAUTION-SEL	—	Fix the L (GND)
68	—	NOSE-SW	—	Nose presence detection ☚

75	POWER SELECT	P. SEL-SW	I	P-SEL input. L : P-SEL OFF setting (to cope with cars without accessory position) ☚

2. CHANGE THE MECHANICAL PARTS

<table>
<tr><th>Page</th><th colspan="3">Former Type</th><th>Remark</th><th colspan="2">New Type</th><th>Remark</th></tr>
<tr><td></td><td>Ref. No.</td><td>Part No.</td><td>Description</td><td></td><td>Part No.</td><td>Description</td><td></td></tr>
<tr><td rowspan="3">55</td><td>4</td><td>X-3364-564-1</td><td>LOCK ASSY</td><td></td><td>X-3366-931-1</td><td>LOCK ASSY</td><td></td></tr>
<tr><td>*10</td><td>X-3366-876-1</td><td>PANEL ASSY, BACK</td><td></td><td>*X-3366-876-2</td><td>PANEL ASSY, BACK</td><td></td></tr>
<tr><td>*TU1</td><td>A-3295-309-A</td><td>TUNER UNIT (TUX-001)</td><td></td><td>A-3282-003-A</td><td>TUNER UNIT (TUX-001A)</td><td></td></tr>
<tr><td>56</td><td colspan="3"> 
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 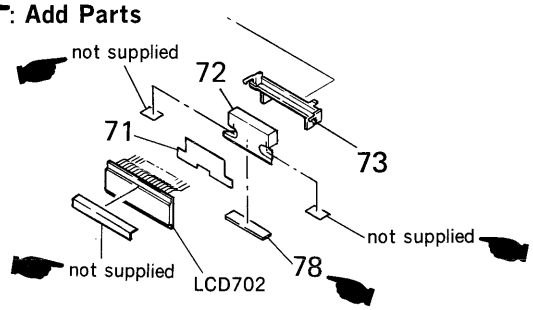
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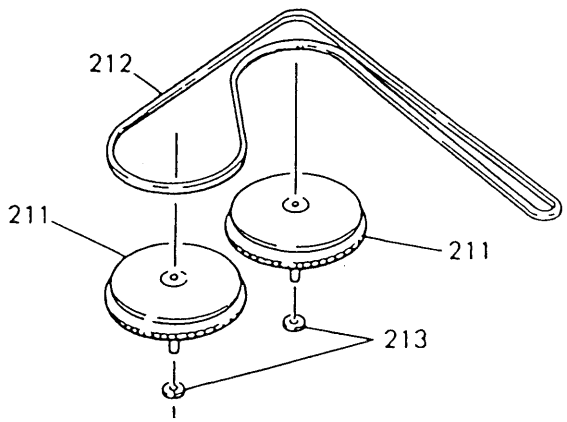
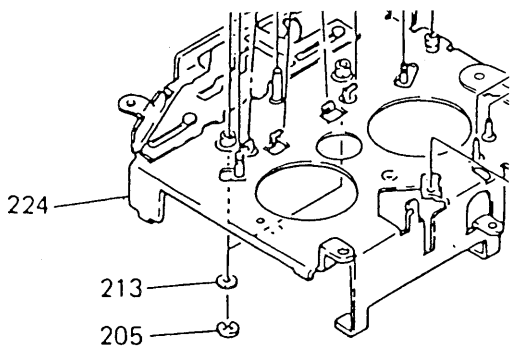
<tr><td></td><td>75</td><td>3-389-674-01</td><td>PLATE (B), INDICATION</td><td></td><td>3-389-674-02</td><td>PLATE (B), INDICATION</td><td></td></tr>
<tr><td></td><td>78</td><td></td><td>———</td><td></td><td>*3-905-675-01</td><td>REFLECTOR (MIRROR)</td><td></td></tr>
<tr><td>59</td><td colspan="3"> 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 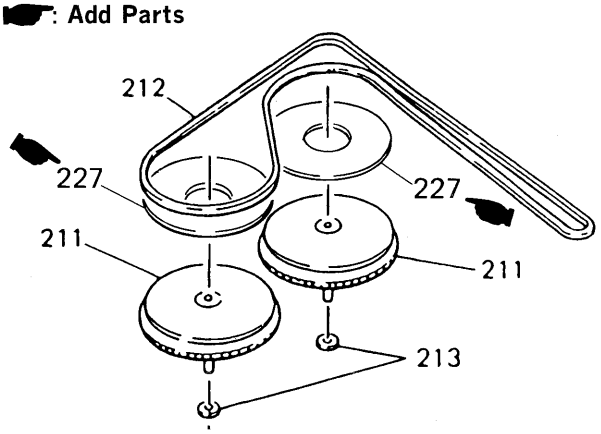

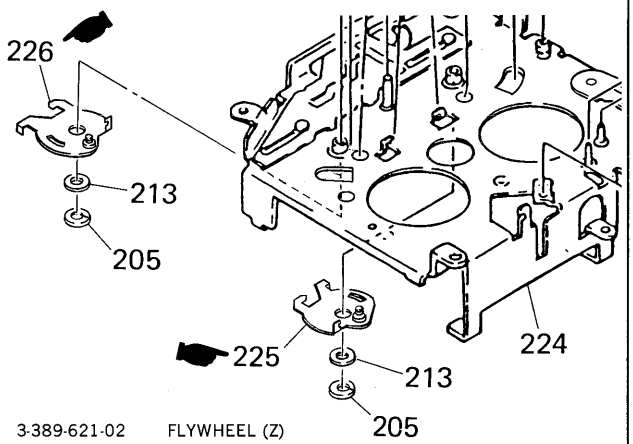
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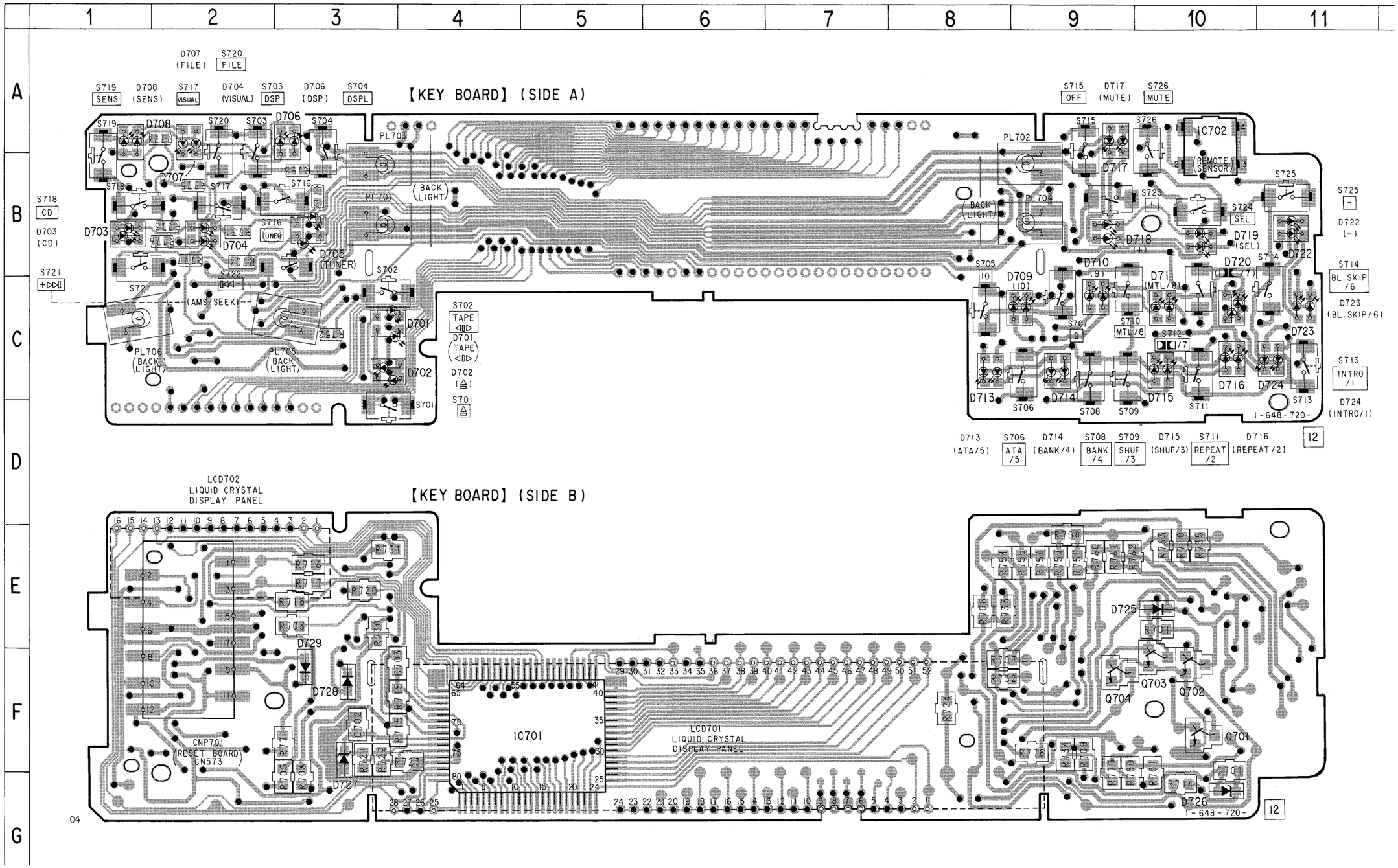
<tr><td></td><td>211</td><td>3-386-047-01</td><td>FLYWHEEL (D)</td><td></td><td>3-389-621-02</td><td>FLYWHEEL (Z)</td><td></td></tr>
<tr><td></td><td>222</td><td>3-344-119-01</td><td>GEAR, RVS CAM</td><td></td><td>3-389-171-01</td><td>GEAR (RVS CAM)</td><td></td></tr>
<tr><td></td><td>225</td><td></td><td>———</td><td></td><td>*X-3366-402-1</td><td>ARM ASSY (PLAY F)</td><td></td></tr>
<tr><td></td><td>226</td><td></td><td>———</td><td></td><td>*X-3366-403-1</td><td>ARM ASSY (PLAY R)</td><td></td></tr>
<tr><td></td><td>227</td><td></td><td>———</td><td></td><td>3-907-512-01</td><td>SHEET (FLYWHEEL)</td><td></td></tr>
</table>

3. CHANGE THE PRINTED CIRCUIT BOARDS

● Semiconductor Location

3-1. PRINTED WIRING BOARD—PANEL SECTION—

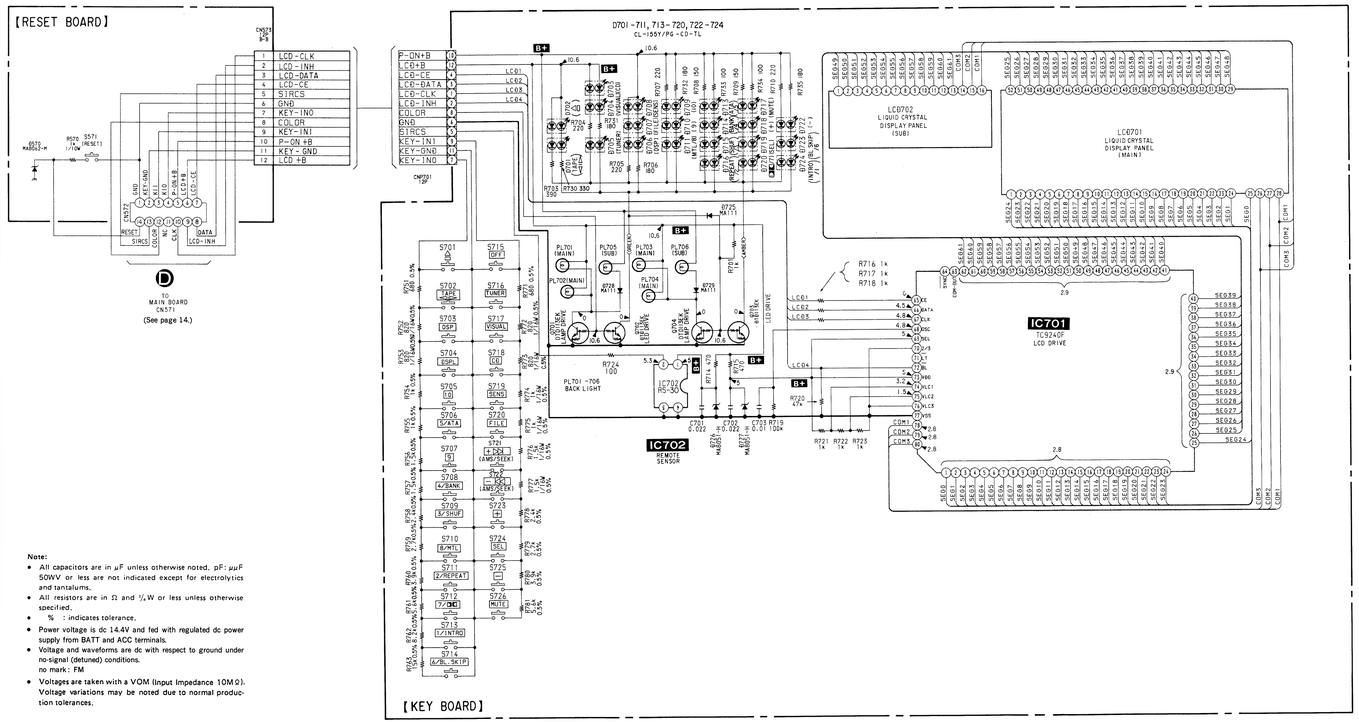
Ref. No.	Location
D701	C-3
D702	C-3
D703	B-1
D704	B-2
D705	B-3
D706	A-3
D707	A-2
D708	A-1
D709	C-9
D710	C-9
D711	C-10
D713	C-8
D714	C-9
D715	C-10
D716	C-10
D717	A-9
D718	B-9
D719	B-10
D720	C-10
D722	B-11
D723	C-11
D724	C-11
D725	E-10
D726	G-10
D727	F-3
D728	F-3
D729	F-3
IC701	F-5
IC702	A-10
Q701	F-10
Q702	F-10
Q703	F-10
Q704	F-9


【KEY BOARD】(SIDE A)
【KEY BOARD】(SIDE B)
D707 (FILE) S720 FILE
S719 SENS D708 (SENS) S717 VISUAL D704 (VISUAL) S703 DSP D706 (DSP) S704 DSPL
S715 OFF D717 (MUTE) S726 MUTE
S718 CD D703 (CD)
S721 +▷▷|
(AMS/SEEK)
S716 TUNER D705 (TUNER)
S722 |◁◁
S702 TAPE ◁II▷ D701 (TAPE ◁II▷)
D702 (▲) S701 ▲
PL701 PL702 PL703 PL704
(BACK LIGHT)
PL705 PL706
IC702 (REMOTE SENSOR)
S723 + S724 SEL D719 (SEL) S725 − D722 (−)
D718 (+)
D710 (9) D709 (10) S705 10
D711 (MTL/9) S710 MTL/8 S712 /7 D720 (/7) S714 D722
S707 9
D723 S714 BL.SKIP /6 D723 (BL.SKIP/6)
S713 INTRO /1 D724 (INTRO/1)
D713 S706 D714 S708 S709 D715 S711 D716 S713
D713 (ATA/5) S706 ATA /5 D714 (BANK/4) S708 BANK /4 S709 SHUF /3 D715 (SHUF/3) S711 REPEAT /2 D716 (REPEAT/2)
I-648-720-
12
LCD702 LIQUID CRYSTAL DISPLAY PANEL
CNP701 (RESET BOARD) CN573
IC701
LCD701 LIQUID CRYSTAL DISPLAY PANEL
D725 Q703 Q704 Q702 Q701 D726
I-648-720-
12
04

Note:

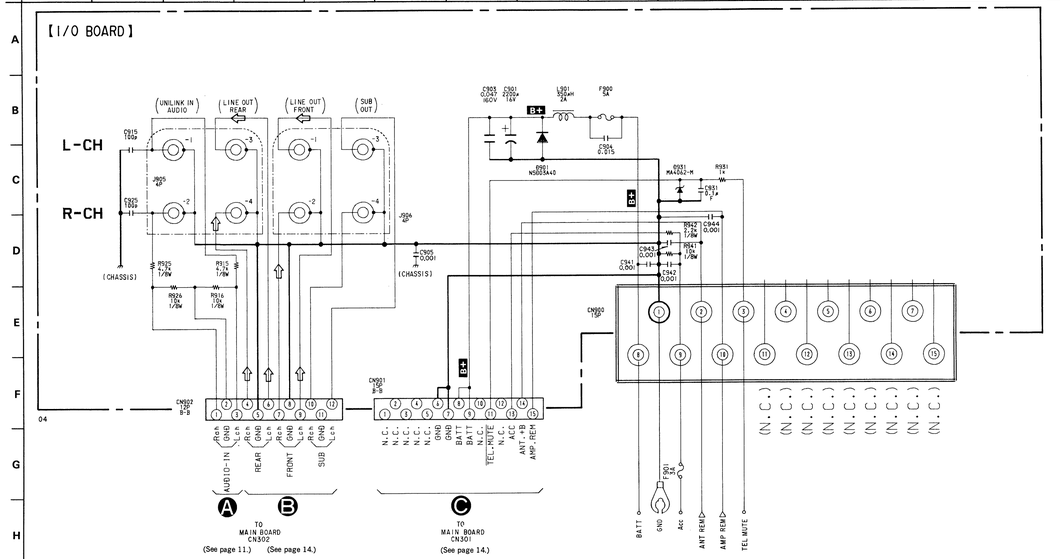
- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.

3-2. SCHEMATIC DIAGRAM—PANEL SECTION—



Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

3-3. SCHEMATIC DIAGRAM—I/O SECTION—



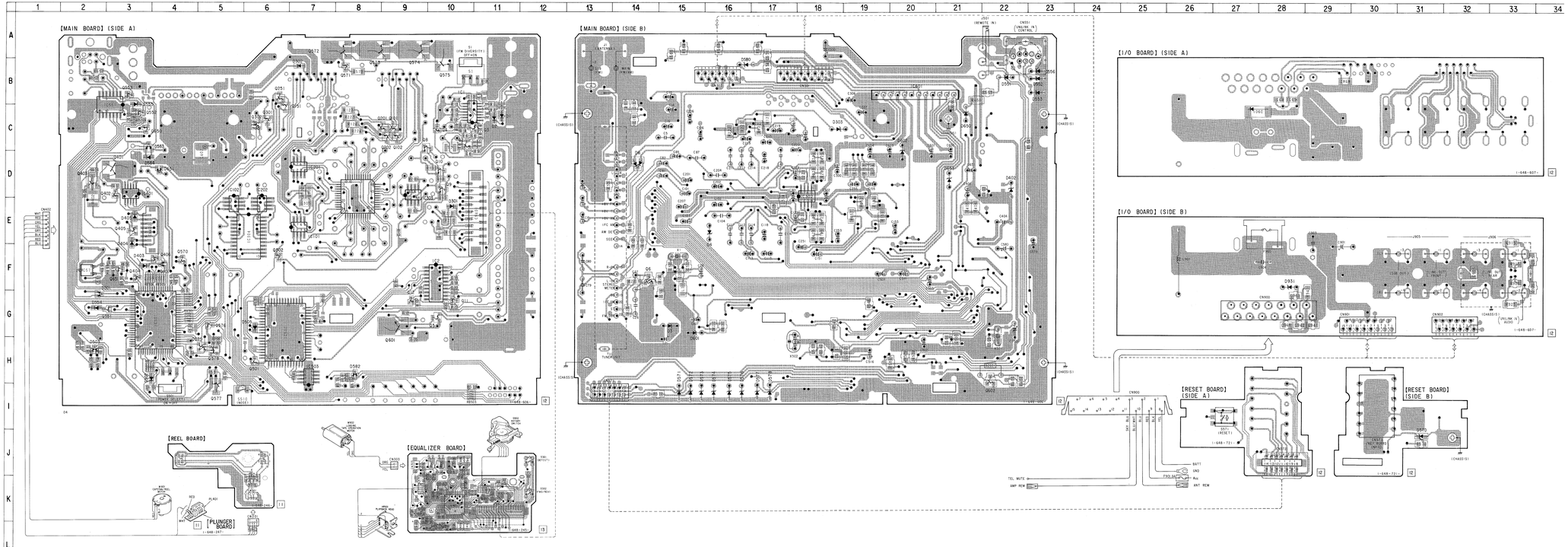
Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- Signal path.
  ⇨ : FM

3-4. SCHEMATIC DIAGRAM—MAIN SECTION—

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ): AM
  〈 〉: PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⊐ : PB

3-5. PRINTED WIRING BOARDS—MAIN SECTION—



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1	C-11	IC401	D-3
D2	C-11	(IC401)	K-10
D3	G-15	IC501	G-4
D4	E-16	IC502	G-6
D6	D-14	IC503	H-7
D301	E-10	IC551	B-3
(D301)	K-11	IC571	F-2
D302	B-7	IC601	B-20
(D302)	K-11		
D303	C-18	PH201	J-4
(D303)	J-12	PH202	J-6
D401	F-4		
D402	D-22	Q2	C-10
D403	F-3	Q3	C-10
D404	E-3	Q4	C-10
D405	E-3	Q5	G-10
D501	G-2	Q6	F-14
D502	H-4	Q8	C-9
D503	H-2	Q9	D-10
D505	G-6	Q10	D-10
D551	B-22	Q11	G-10
D552	B-23	Q12	G-9
D553	B-23	Q101	C-9
D554	G-2	Q102	C-9
D555	B-3	Q151	C-6
D556	B-23	Q201	C-9
D570	J-31	(Q201)	J-6
D571	I-15	Q202	C-9
D572	I-15	Q251	B-6
D573	I-15	Q301	C-6
D574	I-16	Q302	C-6
D575	I-16	Q401	D-3
D576	I-16	Q402	D-3
D577	I-17	Q403	D-2
D578	I-17	Q404	F-3
D580	B-16	Q405	E-3
D582	H-8	Q406	F-4
D583	C-3	Q501	H-6
D584	D-3	Q502	F-6
D601	G-15	Q551	G-3
D602	D-20	Q552	C-3
D650	C-21	Q553	B-3
D651	D-4	Q570	F-4
D653	D-21	Q571	B-8
D901	C-27	Q572	A-8
D931	F-28	Q573	A-8
		Q574	A-9
IC1	C-10	Q575	B-10
IC2	F-10	Q576	G-5
IC101	E-7	Q577	I-5
IC102	E-5	Q578	H-5
IC201	D-7	Q579	H-5
IC202	E-6	Q601	G-9
IC301	D-8	Q602	H-22
IC302	D-18	Q650	C-3
IC303	D-9	Q651	F-3
IC304	E-6		

( ): MECHANISM BLOCK

Note:
- ⟷ : parts extracted from the component side.
- ● : Through hole.
- ▭ : Pattern on the side which is seen.
- ▭ : Pattern of the rear side.

3-6. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA ..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	A-3295-489-A	EQUALIZER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C302	1-104-527-91	FILM CHIP	100PF	5%	50V
C303	1-104-527-91	FILM CHIP	100PF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-107-535-91	ELECT CHIP	0.22uF	20%	50V
C306-308					
	1-104-543-11	FILM CHIP	0.0022uF	5%	50V
C309	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C310	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C311	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-126-187-11	ELECT	0.1uF	20%	50V
C314	1-107-551-91	ELECT CHIP	100uF	20%	10V
C315	1-126-193-11	ELECT	1uF	20%	50V
C316	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C402	1-104-527-91	FILM CHIP	100PF	5%	50V
C403	1-104-527-91	FILM CHIP	100PF	5%	50V
C404	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C405	1-107-535-91	ELECT CHIP	0.22uF	20%	50V
C406-408					
	1-104-543-11	FILM CHIP	0.0022uF	5%	50V
C409	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C410	1-104-563-11	FILM CHIP	0.1uF	5%	16V
C415	1-164-361-11	CERAMIC CHIP	0.047uF		16V
C501	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN301	1-569-806-21	CONNECTOR, FPC 5P			
CN302	1-565-770-11	CONNECTOR, FPC (1.0MM) (ZIF) 6P			
* CN303	1-691-741-21	PIN, CONNECTOR (PC BOARD) 2P			
* CN401	1-750-217-21	CONNECTOR (WAFER) 18P			
		< DIODE >			
D301-303					
	8-719-404-35	DIODE MA141WK			

Ref.No.	Part No.	Description			Remark
		< IC >			
IC401	8-759-160-99	IC HA12174			
		< RESISTOR >			
R301	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R302	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R303	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R304	1-208-468-61	METAL GLAZE	18K	2%	1/10W
R305	1-218-764-11	METAL CHIP	330K	0.5%	1/10W
R306	1-218-724-11	METAL CHIP	22K	0.5%	1/16W
R307	1-218-313-11	METAL CHIP	560	0.5%	1/16W
R308	1-216-839-11	METAL CHIP	33K	5%	1/16W
R309	1-216-836-11	METAL CHIP	18K	5%	1/16W
R310	1-216-845-11	METAL CHIP	100K	5%	1/16W
R311	1-216-851-11	METAL CHIP	330K	5%	1/16W
R312	1-216-853-11	METAL CHIP	470K	5%	1/16W
R313	1-216-841-11	METAL CHIP	47K	5%	1/16W
R314	1-218-722-11	METAL CHIP	18K	0.5%	1/16W
R315	1-216-833-11	METAL CHIP	10K	5%	1/16W
R401	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R402	1-216-693-11	METAL CHIP	56K	0.5%	1/10W
R403	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R404	1-208-468-61	METAL GLAZE	18K	2%	1/10W
R405	1-218-764-11	METAL CHIP	330K	0.5%	1/10W
R406	1-218-724-11	METAL CHIP	22K	0.5%	1/16W
R407	1-218-313-11	METAL CHIP	560	0.5%	1/16W
		< VARIABLE RESISTOR >			
RV301	1-241-552-11	RES, ADJ CERMET 470			
RV401	1-241-552-11	RES, ADJ CERMET 470			
		< SWITCH >			
S301	1-570-953-11	SWITCH, PUSH (1 KEY) (DETECT)			
S302	1-570-953-11	SWITCH, PUSH (1 KEY) (FWD/REV)			
		**********			

I/O KEY

Ref. No.	Part No.	Description			Remark
*	A-3295-564-A	I/O BOARD, COMPLETE			
		**********			
*	3-904-673-01	PLATE (HEAT SINK), GROUND			
	1-533-179-21	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-104-889-91	ELECT	2200uF	20%	16V
C903	1-136-961-11	FILM	0.047uF	10%	160V
C904	1-136-155-00	FILM	0.015uF	5%	50V
C905	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C915	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C925	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C931	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C941-944					
	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
		< CONNECTOR >			
* CN900	1-695-244-21	PLUG, CONNECTOR 15P			
* CN901	1-695-201-11	PLUG, CONNECTOR 15P			
* CN902	1-580-914-11	PLUG, CONNECTOR 12P			
		< DIODE >			
D901	8-719-041-36	DIODE	NSD03A40-TE16L		
D931	8-719-034-46	DIODE	MA4062-M(QZ)		
		< JACK >			
J905	1-691-683-11	JACK, PIN 4P (UNILINK IN AUDIO/LINE OUT REAR)			
J906	1-691-683-11	JACK, PIN 4P (LINE OUT REAR/SUB OUT)			
		< COIL >			
L901	1-406-723-11	COIL, CHOKE (TROIDAL)			
		< RESISTOR >			
R915	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R916	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R925	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R926	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R931	1-216-049-00	METAL CHIP	1K	5%	1/10W
R941	1-208-510-41	METAL GLAZE	10K	2%	1/8W
R942	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W

****

Ref. No.	Part No.	Description			Remark
*	A-3222-649-A	KEY BOARD, COMPLETE			
		**********			
*	3-389-672-01	HOLDER (M:LCD)			
*	3-389-673-01	PLATE (M:LCD), LIGHT GUIDE			
*	3-389-753-01	REFLECTOR (M), SHEET			
*	3-904-246-01	HOLDER (SB:LCD)			
*	3-904-247-01	PLATE (SB:LCD), LIGHT GUIDE			
*	3-904-248-01	REFLECTOR (SB), SHEET			
*	3-905-675-01	REFLECTOR (MIRROR)			
		< CAPACITOR >			
C701	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C702	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C703	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
* CNP701	1-691-557-21	PIN, CONNECTOR 12P			
		< DIODE >			
D701	8-719-987-45	LED	CL-155Y/PG-CD	(TAPE ◁▯▷)	
D702	8-719-987-45	LED	CL-155Y/PG-CD	(⏏)	
D703	8-719-987-45	LED	CL-155Y/PG-CD	(CD)	
D704	8-719-987-45	LED	CL-155Y/PG-CD	(VISUAL)	
D705	8-719-987-45	LED	CL-155Y/PG-CD	(TUNER)	
D706	8-719-987-45	LED	CL-155Y/PG-CD	(DSP)	
D707	8-719-987-45	LED	CL-155Y/PG-CD	(FILE)	
D708	8-719-987-45	LED	CL-155Y/PG-CD	(SENS)	
D709	8-719-987-45	LED	CL-155Y/PG-CD	(10)	
D710	8-719-987-45	LED	CL-155Y/PG-CD	(9)	
D711	8-719-987-45	LED	CL-155Y/PG-CD	(MTL/8)	
D713	8-719-987-45	LED	CL-155Y/PG-CD	(ATA/5)	
D714	8-719-987-45	LED	CL-155Y/PG-CD	(BANK/4)	
D715	8-719-987-45	LED	CL-155Y/PG-CD	(SHUF/3)	
D716	8-719-987-45	LED	CL-155Y/PG-CD	(REPEAT/2)	
D717	8-719-987-45	LED	CL-155Y/PG-CD	(MUTE)	
D718	8-719-987-45	LED	CL-155Y/PG-CD	(+)	
D719	8-719-987-45	LED	CL-155Y/PG-CD	(SEL)	
D720	8-719-987-45	LED	CL-155Y/PG-CD	(▯▯/7)	
D722	8-719-987-45	LED	CL-155Y/PG-CD	(-)	
D723	8-719-987-45	LED	CL-155Y/PG-CD	(BL.SKIP/6)	
D724	8-719-987-45	LED	CL-155Y/PG-CD	(INTRO/1)	
D725	8-719-404-49	DIODE	MA111		
D726	8-719-422-43	DIODE	MA8051-H		
D727	8-719-422-43	DIODE	MA8051-H		
D728	8-719-404-49	DIODE	MA111		
D729	8-719-404-49	DIODE	MA111		

KEY

Ref. No.	Part No.	Description	Remark
		< FUSE >	
F900	1-533-328-11	FUSE (BLADE TYPE) (AUTO FUSE) (5A)	
		< IC >	
IC701	8-759-246-16	IC TC9240F	
IC702	8-759-194-76	IC RS-30	
		< LIQUID CRYSTAL DISPLAY >	
LCD701	1-810-094-11	DISPLAY PANEL, LIQUID CRYSTAL	
LCD702	1-810-095-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< PILOT LAMP >	
PL701	1-517-181-11	LAMP, PILOT	
PL702	1-517-181-11	LAMP, PILOT	
PL703	1-517-181-21	LAMP, PILOT	
PL704	1-517-181-21	LAMP, PILOT	
PL705	1-517-181-11	LAMP, PILOT	
PL706	1-517-181-21	LAMP, PILOT	
		< TRANSISTOR >	
Q701-704			
	8-729-904-66	TRANSISTOR DTD113EK	
		< RESISTOR >	
R701	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R703	1-216-039-00	METAL CHIP 390 5% 1/10W	
R704	1-216-033-00	METAL CHIP 220 5% 1/10W	
R705	1-216-033-00	METAL CHIP 220 5% 1/10W	
R706	1-216-031-00	METAL CHIP 180 5% 1/10W	
R707	1-216-033-00	METAL CHIP 220 5% 1/10W	
R708	1-216-029-00	METAL CHIP 150 5% 1/10W	
R709	1-216-029-00	METAL CHIP 150 5% 1/10W	
R710	1-216-033-00	METAL CHIP 220 5% 1/10W	
R714	1-216-041-00	METAL CHIP 470 5% 1/10W	
R715	1-216-041-00	METAL CHIP 470 5% 1/10W	
R716-718			
	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R719	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R720	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R721-723			
	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R724	1-216-025-00	METAL CHIP 100 5% 1/10W	
R730	1-216-037-00	METAL CHIP 330 5% 1/10W	
R731	1-216-031-00	METAL CHIP 180 5% 1/10W	
R732	1-216-031-00	METAL CHIP 180 5% 1/10W	
R733	1-216-025-00	METAL CHIP 100 5% 1/10W	
R734	1-216-025-00	METAL CHIP 100 5% 1/10W	
R735	1-216-031-00	METAL CHIP 180 5% 1/10W	
R751	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R752	1-216-820-11	METAL CHIP 820 5% 1/16W	
R753	1-216-820-11	METAL CHIP 820 5% 1/16W	
R754	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R755	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R756	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R757	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R758	1-216-660-11	METAL CHIP 2.4K 0.5% 1/10W	
R759	1-216-661-11	METAL CHIP 2.7K 0.5% 1/10W	
R760	1-216-665-11	METAL CHIP 3.9K 0.5% 1/10W	
R761	1-216-669-11	METAL CHIP 5.6K 0.5% 1/10W	
R762	1-216-673-11	METAL CHIP 8.2K 0.5% 1/10W	
R763	1-216-679-11	METAL CHIP 15K 0.5% 1/10W	
R771	1-216-647-11	METAL CHIP 680 0.5% 1/10W	
R772	1-216-820-11	METAL CHIP 820 5% 1/16W	
R773	1-216-820-11	METAL CHIP 820 5% 1/16W	
R774	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R775	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R776	1-216-823-11	METAL CHIP 1.5K 5% 1/16W	
R777	1-216-823-11	METAL CHIP 1.5K 5% 1/16W	
R778	1-216-660-11	METAL CHIP 2.4K 0.5% 1/10W	
R779	1-216-661-11	METAL CHIP 2.7K 0.5% 1/10W	
R780	1-216-665-11	METAL CHIP 3.9K 0.5% 1/10W	
R781	1-216-669-11	METAL CHIP 5.6K 0.5% 1/10W	
		< SWITCH >	
S701	1-692-037-31	SWITCH, KEY BOARD (⏏)	
S702	1-692-037-31	SWITCH, KEY BOARD (TAPE ◁▯▷)	
S703	1-692-037-31	SWITCH, KEY BOARD (DSP)	
S704	1-692-037-31	SWITCH, KEY BOARD (DSPL)	
S705	1-692-037-31	SWITCH, KEY BOARD (10)	
S706	1-692-037-31	SWITCH, KEY BOARD (ATA/5)	
S707	1-692-037-31	SWITCH, KEY BOARD (9)	
S708	1-692-037-31	SWITCH, KEY BOARD (BANK/4)	
S709	1-692-037-31	SWITCH, KEY BOARD (SHUF/3)	
S710	1-692-037-31	SWITCH, KEY BOARD (MTL/8)	
S711	1-692-037-31	SWITCH, KEY BOARD (REPEAT/2)	
S712	1-692-037-31	SWITCH, KEY BOARD (□□ /7)	
S713	1-692-037-31	SWITCH, KEY BOARD (INTRO/1)	
S714	1-692-037-31	SWITCH, KEY BOARD (BL. SKIP/6)	
S715	1-692-037-31	SWITCH, KEY BOARD (OFF)	
S716	1-692-037-31	SWITCH, KEY BOARD (TUNER)	
S717	1-692-037-31	SWITCH, KEY BOARD (VISUAL)	
S718	1-692-037-31	SWITCH, KEY BOARD (CD)	
S719	1-692-037-31	SWITCH, KEY BOARD (SENS)	
S720	1-692-037-31	SWITCH, KEY BOARD (FILE)	
S721	1-692-037-31	SWITCH, KEY BOARD (+ ⏭ (AMS/SEEK))	
S722	1-692-037-31	SWITCH, KEY BOARD (⏮ - (AMS/SEEK))	

KEY MAIN

Ref. No.	Part No.	Description			Remark
S723	1-692-037-31	SWITCH, KEY BOARD (+)			
S724	1-692-037-31	SWITCH, KEY BOARD (SEL)			
S725	1-692-037-31	SWITCH, KEY BOARD (-)			
S726	1-692-037-31	SWITCH, KEY BOARD (MUTE)			
**********					
*	A-3295-562-A	MAIN BOARD, COMPLETE			
		**********			
		< BUZZER >			
BZ601	1-529-108-21	BUZZER, PIEZOELECTRIC			
		< CAPACITOR >			
C1	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C2	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C5	1-130-475-00	MYLAR	0.0022uF	5%	50V
C6	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C7	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C8	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C9	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C10	1-126-157-11	ELECT	10uF	20%	16V
C11	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C12	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C13	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C14	1-126-157-11	ELECT	10uF	20%	16V
C15	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C16	1-126-157-11	ELECT	10uF	20%	16V
C17-19					
	1-124-994-11	ELECT	100uF	20%	10V
C21	1-124-584-00	ELECT	100uF	20%	10V
C26	1-136-169-00	FILM	0.22uF	5%	50V
C27	1-130-479-00	MYLAR	0.0047uF	5%	50V
C28	1-126-157-11	ELECT	10uF	20%	16V
C29	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C30	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C31	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C32-35					
	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C79	1-136-158-00	FILM	0.027uF	5%	50V
C80	1-136-158-00	FILM	0.027uF	5%	50V
C81	1-104-947-61	ELECT	4.7uF	20%	35V
C82	1-104-947-61	ELECT	4.7uF	20%	35V
C85	1-104-943-61	ELECT	2.2uF	20%	50V
C87	1-136-161-00	FILM	0.047uF	5%	50V
C88	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C101	1-104-943-61	ELECT	2.2uF	20%	50V
C102	1-104-943-61	ELECT	2.2uF	20%	50V

Ref. No.	Part No.	Description			Remark
C104	1-136-155-00	FILM	0.015uF	5%	50V
C106	1-104-943-61	ELECT	2.2uF	20%	50V
C107	1-104-943-61	ELECT	2.2uF	20%	50V
C111	1-136-164-00	FILM	0.082uF	5%	50V
C112	1-130-475-00	MYLAR	0.0022uF	5%	50V
C113	1-104-948-61	ELECT	10uF	20%	35V
C114	1-130-478-00	MYLAR	0.0039uF	5%	50V
C115	1-104-948-61	ELECT	10uF	20%	35V
C116	1-136-169-00	FILM	0.22uF	5%	50V
C118-120					
	1-104-948-61	ELECT	10uF	20%	35V
C121	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C122	1-128-241-11	ELECT	220uF	20%	10V
C151	1-104-948-61	ELECT	10uF	20%	35V
C153	1-104-948-61	ELECT	10uF	20%	35V
C155	1-104-948-61	ELECT	10uF	20%	35V
C201	1-104-943-61	ELECT	2.2uF	20%	50V
C202	1-104-943-61	ELECT	2.2uF	20%	50V
C204	1-136-155-00	FILM	0.015uF	5%	50V
C206	1-104-943-61	ELECT	2.2uF	20%	50V
C207	1-104-943-61	ELECT	2.2uF	20%	50V
C211	1-136-164-00	FILM	0.082uF	5%	50V
C212	1-130-475-00	MYLAR	0.0022uF	5%	50V
C213	1-104-948-61	ELECT	10uF	20%	35V
C214	1-130-478-00	MYLAR	0.0039uF	5%	50V
C215	1-104-948-61	ELECT	10uF	20%	35V
C216	1-136-169-00	FILM	0.22uF	5%	50V
C218-220					
	1-104-948-61	ELECT	10uF	20%	35V
C221	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C222	1-128-241-11	ELECT	220uF	20%	10V
C251	1-104-948-61	ELECT	10uF	20%	35V
C253	1-104-948-61	ELECT	10uF	20%	35V
C255	1-104-948-61	ELECT	10uF	20%	35V
C300	1-104-955-61	ELECT	100uF	20%	10V
C301	1-104-955-61	ELECT	100uF	20%	10V
C302	1-104-949-61	ELECT	22uF	20%	35V
C303	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C304	1-104-551-11	FILM CHIP	0.01uF	5%	16V
C305	1-104-559-11	FILM CHIP	0.047uF	5%	16V
C306	1-124-589-11	ELECT	47uF	20%	16V
C307	1-104-943-61	ELECT	2.2uF	20%	50V
C401	1-126-157-11	ELECT	10uF	20%	16V
C402	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C404	1-126-013-11	ELECT	1000uF	20%	16V
C500	1-126-103-11	ELECT	470uF	20%	16V
C501	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C502	1-126-157-11	ELECT	10uF	20%	16V
C503	1-126-157-11	ELECT	10uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C505	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C506	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C507	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C509	1-126-157-11	ELECT	10uF	20%	16V
C510	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C511	1-126-157-11	ELECT	10uF	20%	16V
C512-514					
	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C515	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C516	1-126-157-11	ELECT	10uF	20%	16V
C517	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C550	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C574	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C575	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C578	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C579	1-126-924-11	ELECT	330uF	20%	10V
C580	1-125-705-11	DOUBLE LAYERS	0.22F		5.5V
C581	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C600	1-124-248-00	ELECT	22uF	20%	35V
C601	1-124-248-00	ELECT	22uF	20%	35V
C602	1-135-138-11	TANTAL. CHIP	10uF	20%	25V
C603	1-124-589-11	ELECT	47uF	20%	16V
C604	1-124-589-11	ELECT	47uF	20%	16V
C605	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C607	1-124-584-00	ELECT	100uF	20%	10V
C609	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C651	1-104-947-61	ELECT	4.7uF	20%	35V
		< CONNECTOR >			
* CN301	1-695-202-11	SOCKET, CONNECTOR 15P			
CN302	1-580-916-11	SOCKET, CONNECTOR 12P			
* CN401	1-750-218-21	CONNECTOR (HOUSING) 18P			
CN402	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD) 8P			
CN551	1-580-907-11	PLUG, CONNECTOR (UNILINK IN CONTROL)			
CN571	1-750-621-11	PLUG, CONNECTOR (14P-L)			
		< TRIMMER >			
CT501	1-141-276-00	CAP, TRIMMER			
		< DIODE >			
D1	8-719-038-32	DIODE	1SS314-TPH3		
D2	8-719-038-32	DIODE	1SS314-TPH3		
D3	8-719-034-59	DIODE	MA4082-H(QZ)		
D4	8-719-034-22	DIODE	MA4039-M(QZ)		
D6	8-719-040-04	DIODE	MA721WK-(TX)		
D301	8-719-404-49	DIODE	MA111		
D302	8-719-404-49	DIODE	MA111		
D303	8-719-034-22	DIODE	MA4039-M(QZ)		

Ref. No.	Part No.	Description		Remark
D401	8-719-027-50	DIODE	MA142WK	
D402	8-719-034-63	DIODE	MA4091-H(QZ)	
D403-405				
	8-719-404-49	DIODE	MA111	
D501	8-719-027-48	DIODE	MA142WA	
D502	8-719-404-49	DIODE	MA111	
D503	8-719-027-48	DIODE	MA142WA	
D505	8-719-404-49	DIODE	MA111	
D551	8-719-034-49	DIODE	MA4068-L(QZ)	
D552	8-719-034-46	DIODE	MA4062-M(QZ)	
D553	8-719-034-46	DIODE	MA4062-M(QZ)	
D554	8-719-404-49	DIODE	MA111	
D555	8-719-404-49	DIODE	MA111	
D556	8-719-034-46	DIODE	MA4062-M(QZ)	
D571-578				
	8-719-034-46	DIODE	MA4062-M(QZ)	
D580	8-719-034-70	DIODE	MA4110-M(QZ)	
D582	8-719-027-48	DIODE	MA142WA	
D583	8-719-040-04	DIODE	MA721WK-(TX)	
D584	8-719-404-49	DIODE	MA111	
D601	8-719-034-41	DIODE	MA4056-L(QZ)	
D602	8-719-034-96	DIODE	MA4200-(QZ)	
D650	8-719-034-96	DIODE	MA4200-(QZ)	
D651	8-719-027-50	DIODE	MA142WK	
D653	8-719-034-54	DIODE	MA4075-M(QZ)	
		< IC >		
IC1	8-759-069-48	IC	LA1061M	
IC2	8-759-823-81	IC	LC7216M	
IC101	8-759-700-94	IC	NJM5532M	
IC102	8-759-701-40	IC	NJM3404AM-T1	
IC201	8-759-700-94	IC	NJM5532M	
IC202	8-759-701-40	IC	NJM3404AM-T1	
IC301	8-752-063-44	IC	CXA1646Q	
IC302	8-759-700-94	IC	NJM5532M	
IC303	8-759-701-40	IC	NJM3404AM-T1	
IC304	8-759-165-34	IC	TC9212F	
IC401	8-759-823-87	IC	LB1638M	
IC501	8-759-189-20	IC	uPD75518GF-131-3B9	
IC502	8-759-166-74	IC	uPD75116GF-G50-3BE	
IC503	8-759-165-36	IC	X24C04S8IC7000	
IC551	8-759-096-16	IC	MM1175XF-T1	
IC571	8-759-167-83	IC	PST600EMT-T1	
IC601	8-759-182-75	IC	BA3910B-V2	
		< JACK >		
J1	1-750-617-11	JACK (ANTENNA)		
J501	1-566-822-11	JACK (REMOTE IN)		

MAIN

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JR500	1-216-864-11	METAL CHIP	0	5%	1/16W
JR578	1-216-295-00	METAL CHIP	0	5%	1/10W
JR579	1-216-295-00	METAL CHIP	0	5%	1/10W
		< COIL >			
L1	1-412-003-41	INDUCTOR CHIP	5.6uH		
L2	1-410-216-31	INDUCTOR CHIP	100uH		
L3	1-410-204-31	INDUCTOR CHIP	10uH		
L501	1-410-204-31	INDUCTOR CHIP	10uH		
L502	1-410-204-31	INDUCTOR CHIP	10uH		
		< TRANSISTOR >			
Q2	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q3	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q4	8-729-230-60	TRANSISTOR	2SA1586-YG		
Q5	8-729-230-49	TRANSISTOR	2SC2712-YG		
Q6	8-729-021-94	TRANSISTOR	2SK1657-T1B		
Q8-10					
	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q11	8-729-015-74	TRANSISTOR	UN5111		
Q12	8-729-231-74	TRANSISTOR	2SC4116-GL		
Q101	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q102	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q151	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q201	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q202	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q251	8-729-021-95	TRANSISTOR	RN1441-A-TE85L		
Q301	8-729-424-52	TRANSISTOR	UN211F-TX		
Q302	8-729-021-93	TRANSISTOR	UPA502T-T1		
Q401	8-729-807-12	TRANSISTOR	2SD1802-S		
Q402	8-729-015-74	TRANSISTOR	UN5111		
Q403	8-729-106-60	TRANSISTOR	2SB1115A		
Q404	8-729-015-76	TRANSISTOR	UN5211		
Q405	8-729-902-99	TRANSISTOR	DTC114TK		
Q406	8-729-015-76	TRANSISTOR	UN5211		
Q501	8-729-015-76	TRANSISTOR	UN5211		
Q502	8-729-015-74	TRANSISTOR	UN5111		
Q551	8-729-403-35	TRANSISTOR	UN5113		
Q552	8-729-231-74	TRANSISTOR	2SC4116-GL		
Q553	8-729-015-74	TRANSISTOR	UN5111		
Q570	8-729-015-76	TRANSISTOR	UN5211		
Q571	8-729-015-74	TRANSISTOR	UN5111		
Q572-575					
	8-729-807-12	TRANSISTOR	2SD1802-S		
Q576	8-729-015-76	TRANSISTOR	UN5211		
Q577	8-729-106-60	TRANSISTOR	2SB1115A		
Q578	8-729-920-56	TRANSISTOR	FMG1		
Q579	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q601	8-729-807-12	TRANSISTOR	2SD1802-S		
Q602	8-729-421-22	TRANSISTOR	UN2211		
Q650	8-729-015-76	TRANSISTOR	UN5211		
Q651	8-729-231-74	TRANSISTOR	2SC4116-GL		
		< RESISTOR >			
R1	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R2	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R4	1-216-840-11	METAL CHIP	39K	5%	1/16W
R5	1-216-833-11	METAL CHIP	10K	5%	1/16W
R6	1-216-857-11	METAL CHIP	1M	5%	1/16W
R7	1-216-837-11	METAL CHIP	22K	5%	1/16W
R8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R9	1-216-097-00	METAL CHIP	100K	5%	1/10W
R10	1-216-842-11	METAL CHIP	56K	5%	1/16W
R11	1-216-845-11	METAL CHIP	100K	5%	1/16W
R12	1-218-293-11	METAL GLAZE	24K	5%	1/16W
R13	1-216-845-11	METAL CHIP	100K	5%	1/16W
R14	1-216-833-11	METAL CHIP	10K	5%	1/16W
R15	1-216-833-11	METAL CHIP	10K	5%	1/16W
R16	1-216-845-11	METAL CHIP	100K	5%	1/16W
R17	1-216-845-11	METAL CHIP	100K	5%	1/16W
R18	1-216-821-11	METAL CHIP	1K	5%	1/16W
R21	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R22	1-216-049-00	METAL CHIP	1K	5%	1/10W
R23	1-216-073-00	METAL CHIP	10K	5%	1/10W
R24	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R25	1-216-833-11	METAL CHIP	10K	5%	1/16W
R27	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R29	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R30	1-216-833-11	METAL CHIP	10K	5%	1/16W
R31	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R32	1-216-833-11	METAL CHIP	10K	5%	1/16W
R33	1-216-049-00	METAL CHIP	1K	5%	1/10W
R81	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R82	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R83	1-126-669-11	METAL CHIP	5.6K	0.5%	1/10W
R85	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R87	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R88	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R101	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R110	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R111	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R121	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R122	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R123	1-208-470-41	METAL GLAZE	220	2%	1/8W
R124	1-208-470-41	METAL GLAZE	220	2%	1/8W
R125	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R126	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W

Ref. No.	Part No.	Description			Remark
R127	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R128	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R151	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R152	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R153	1-208-470-41	METAL GLAZE	220	2%	1/8W
R154	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R201	1-216-699-11	METAL CHIP	100K	0.5%	1/10W
R210	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R211	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R221	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R222	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R223	1-208-470-41	METAL GLAZE	220	2%	1/8W
R224	1-208-470-41	METAL GLAZE	220	2%	1/8W
R225	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R226	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R227	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R228	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R251	1-208-498-41	METAL GLAZE	3.3K	2%	1/8W
R252	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R253	1-208-470-41	METAL GLAZE	220	2%	1/8W
R254	1-208-559-41	METAL GLAZE	22K	2%	1/8W
R301	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R302	1-208-502-41	METAL GLAZE	4.7K	2%	1/8W
R306	1-216-017-00	METAL CHIP	47	5%	1/10W
R401	1-216-821-11	METAL CHIP	1K	5%	1/16W
R402	1-220-149-11	METAL GLAZE	2.2	10%	1/2W
R403	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R404	1-216-833-11	METAL CHIP	10K	5%	1/16W
R405	1-208-474-41	METAL GLAZE	330	2%	1/8W
R406	1-208-474-41	METAL GLAZE	330	2%	1/8W
R502	1-216-845-11	METAL CHIP	100K	5%	1/16W
R507	1-216-837-11	METAL CHIP	22K	5%	1/16W
R510	1-216-821-11	METAL CHIP	1K	5%	1/16W
R521	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R522	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R523	1-216-025-00	METAL CHIP	100	5%	1/10W
R524	1-216-025-00	METAL CHIP	100	5%	1/10W
R530	1-216-864-11	METAL CHIP	0	5%	1/16W
R532-534					
	1-216-837-11	METAL CHIP	22K	5%	1/16W
R538	1-216-841-11	METAL CHIP	47K	5%	1/16W
R540	1-216-049-00	METAL CHIP	1K	5%	1/10W
R541	1-216-841-11	METAL CHIP	47K	5%	1/16W
R542	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/16W
R544	1-216-845-11	METAL CHIP	100K	5%	1/16W
R546	1-216-073-00	METAL CHIP	10K	5%	1/10W
R550	1-216-017-00	METAL CHIP	47	5%	1/10W
R551	1-216-025-00	METAL CHIP	100	5%	1/10W
R552	1-216-025-00	METAL CHIP	100	5%	1/10W
R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R554	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/16W
R556	1-216-845-11	METAL CHIP	100K	5%	1/16W
R572	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W
R573	1-216-025-00	METAL CHIP	100	5%	1/10W
R575	1-216-025-00	METAL CHIP	100	5%	1/10W
R576	1-216-025-00	METAL CHIP	100	5%	1/10W
R579	1-208-474-41	METAL GLAZE	330	2%	1/8W
R582-585					
	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R586	1-208-488-41	METAL GLAZE	1.2K	2%	1/8W
R587	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R588	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R589	1-216-839-11	METAL CHIP	33K	5%	1/16W
R590	1-216-845-11	METAL CHIP	100K	5%	1/16W
R591	1-216-833-11	METAL CHIP	10K	5%	1/16W
R592	1-216-845-11	METAL CHIP	100K	5%	1/16W
R601	1-216-057-91	METAL GLAZE	2.2K	5%	1/10W
R602	1-216-049-00	METAL CHIP	1K	5%	1/10W
R603	1-216-037-00	METAL CHIP	330	5%	1/10W
R650	1-208-494-41	METAL GLAZE	2.2K	2%	1/8W
R653	1-216-841-11	METAL CHIP	47K	5%	1/16W
R654	1-216-841-11	METAL CHIP	47K	5%	1/16W
R655	1-216-838-11	METAL CHIP	27K	5%	1/16W
R656	1-216-845-11	METAL CHIP	100K	5%	1/16W

< NETWORK RESISTOR >

RB501	1-239-426-91	RESISTOR, NETWORK (CHIP TYPE) 2.2KX4
RB503	1-239-426-91	RESISTOR, NETWORK (CHIP TYPE) 2.2KX4
RB504	1-239-426-91	RESISTOR, NETWORK (CHIP TYPE) 2.2KX4
RB505-507		
	1-236-907-11	RESISTOR, NETWORK (CHIP TYPE) 100KX4

< SWITCH >

S1	1-572-272-11	SWITCH, SLIDE (FM DIVERSITY)
S501	1-572-272-11	SWITCH, SLIDE (POWER SELECT)
S510	1-572-288-11	SWITCH, PUSH (NOSE)

< TUNER >

TU1	A-3282-003-A	TUNER UNIT (TUX-001A)

< VIBRATOR >

X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)
X501	1-567-821-11	VIBRATOR, CRYSTAL (4.19MHz)
X502	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)

****

PLUNGER | REEL | RESET

Ref. No.	Part No.	Description	Remark
*	1-648-247-11	PLUNGER BOARD	
		**********	
		< PLUNGER >	
PL401	1-454-461-11	SOLENOID, PLUNGER	
**********			
*	1-648-246-11	REEL BOARD	
		**********	
		< CONNECTOR >	
CN201	1-691-742-11	PIN, CONNECTOR (PC BOARD) 4P	
		< PHOTO INTERRUPTER >	
PH201	8-719-988-14	PHOTO INTERRUPTER PR-11-B	
PH202	8-719-988-14	PHOTO INTERRUPTER PR-11-B	
		< TRANSISTOR >	
Q201	8-729-403-07	TRANSISTOR XN1213	
		< RESISTOR >	
R201	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R202	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R203	1-216-190-00	METAL GLAZE 470 5% 1/8W	
**********			
*	1-648-719-11	RESET BOARD	
		**********	
		< CONNECTOR >	
CN572	1-750-622-11	SOCKET, CONNECTOR 14P	
* CN573	1-691-558-11	SOCKET, CONNECTOR 12P	
		< DIODE >	
D570	8-719-422-64	DIODE MA8062-M	
		< RESISTOR >	
R570	1-216-049-00	METAL CHIP 1K 5% 1/10W	
		< SWITCH >	
S571	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE) (RESET)	
**********			

9-957-919-81

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Mobile Electronics Group

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